ARCTIC DATA COMPILATION AND APPRAISAL

VOLUME 10

Beaufort Sea: Biological Oceanography – Whales

1848 to 1983

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1987

CANADIAN DATA REPORT OF HYDROGRAPHY AND OCEAN SCIENCES NO. 5

Canada

87-04062/

Canadian Data Report Of Hydrography and Ocean Sciences

These reports provide a medium for the documentation and dissemination of data in a form directly useable by the scientific and engineering communities.

Generally, the reports will contain raw and/or analyzed data but will not contain interpretations of the data. Such compilations will commonly have been prepared in support of work related to the programs and interests of the Ocean Science and Surveys (OSS) sector of the Department of Fisheries and Oceans.

Data Reports are produced regionally but are numbered and indexed nationally. Requests for individual reports will be fulfilled by the issuing establishment listed on the front cover and title page. Out of stock reports will be supplied for a fee by commercial agents.

Regional and headquarters establishments of Ocean Science and Surveys ceased publication of their various report series as of December 1981. A complete listing of these publications and the last number issued under each title are published in the *Canadian Journal of Fisheries and Aquatic Sciences,* Volume 38: Index to Publications 1981. The current series began with Report Number 1 in January 1982.

Rapport statistique canadien sur l'hydrographie et les sciences océaniques

Ces rapports servent de véhicule pour la compilation et la diffusion des données sous une forme directement utilisable par les scientifiques et les techniciens.

En général, les rapports contiennent des données brutes ou analysées mais ne fournissent pas d'interprétations des données. Ces compilations sont préparées le plus souvent à l'appui de travaux reliés aux programmes et intérêts du service des Sciences et Levés océaniques (SLO) du ministère des Pêches et des Océans.

Les rapports statistiques sont produits à l'échelon régional mais sont numérotés et placés dans l'index à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page de titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Les établissements des Sciences et Levés océaniques dans les régions et à l'administration centrale ont cessé de publier leurs diverses séries de rapports depuis décembre 1981. Vous trouverez dans l'index des publications du volume 38 du *Journal canadien des sciences halieutiques et aquatiques,* la liste de ces publications ainsi que le dernier numéro paru dans chaque catégorie. La nouvelle série a commencé avec la publication du Rapport n° 1 en janvier 1982.

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PREFACE

These catalogues are produced by the Data Assessment Division at the Institute of Ocean Sciences and the Regulatory and Native Affairs Division at the Freshwater Institute. Joint government and industry contract projects have catalogued marine data sets, their focus being mainly on oceanography and fisheries. Data quality appraisals are included to assist in establishing the usefulness of given data for particular analyses or purposes. The ratings also determine the confidence that can be placed on interpretations incorporating those data.

The appraisals will assist in establishing priorities for incorporating the most useful data in the national Marine Environmental Data Service (MEDS) archives. Additional uses of the catalogues include the provision of the best available resume of marine data sources for research planning, environmental assessments, land use planning, regulatory approvals and operational procedures.

In the past, the pace of offshore development activity has emphasized the need to review the sufficiency and suitability of available scientific information for design, regulatory and planning purposes. The review is a three-stage process: 1) compilation and appraisal of the existing data sets; 2) analysis of the suitability of existing data sets for contributing answers to questions of concern; and, 3) analysis and interpretation of data and estimation of scientific confidence in the answer to the particular question. This whale catalogue for the Beaufort Sea represents part of the results of the first stage.

Brian Smiley and Larry de March
Scientific Editors
Arctic Data Compilation and Appraisal
Series

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Cat. No. Fs 97-16/5 ISSN 0711-6721

The correct citation for this publication is:

Norton, P., B.D. Smiley and L. de March. 1987. Arctic Data Compilation and Appraisal. Volume 10. Beaufort Sea: Biological Oceanography-Whales, 1848 to 1983. Can. Data Rep. Hydrogr. Ocean Sci. 5: (Vol. 10) 407p.

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ABSTRACT

Norton, P., B.D. Smiley and L. de March. 1987. Arctic Data Compilation and Appraisal. Volume 10. Beaufort Sea: Biological Oceanography-Whales, 1848 - 1983. Can. Data Rep. Hydrogr. Ocean Sci. 5: (Vol. 10) 407p.

This volume is one of a group of catalogues designed to compile and appraise marine data sets for the Canadian Arctic. For user convenience, the group has been organized with its subject matter divided into three general disciplines: physics, chemistry and biology. The Arctic has been arbitrarily divided into seven geographical areas incorporating, where possible, major oceanographic regions. The format throughout has been structured to facilitate comparison among subjects and regions. With such a large undertaking, it is not possible to provide all reports at once. Therefore, catalogues which are presently available in the series are indicated on the inside back cover of each volume.

Data collection is a continuing process and further updates of the catalogues are planned. Readers are requested to submit corrections and additions by writing the issuing establishment. Such corrections will be incorporated in on-line computerized data set listings and will be continuously available upon request.

SOMMAIRE

Norton, P., B.D. Smiley and L. de March. 1987. Arctic Data Compilation and Appraisal. Volume 10. Beaufort Sea: Biological Oceanography-Whales, 1848 - 1983. Can. Data Rep. Hydrogr. Ocean Sci. 5: (Vol. 10) 407p.

Le présent volume fait partie d'un groupe de catalogues destinés à compiler et à évaluer lés séries de données marines sur l'Arctique canadien. Pour plus de commodité, la question traitée est structurée en trois grandes disciplines: physique, chimie et biologie. L'Arctique a été divisé arbitrairement en sept régions géographiques qui englobent autant que possible les grandes régions océanographiques. Les catalogues sont présentés de façon à faciliter la comparaison entre les sujets et les régions. Le domaine est si vaste qui'il est impossible de fournir tous les catalogues en une seule fois. Les catalogues de la série actuellement disponibles sont indiqués à la fin de chaque volume à l'interieur de la couverture.

La collecte des données est un processus permanent et il est prévu de mettre à jour les catalogues par la suite. Les lecteurs sont invités à soumettre par écrit les corrections et les additions à l'établissement auteur. Ces corrections seront traitées en direct sur ordinateur et incorporées aux listages qui pourront être obtenus sur demande.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the many people who contributed to the preparation of this report. Lois Harwood (University of Alberta), Dave Thomas (Seakem Oceanography Ltd.), Ricki Hurst (Dept. of Indian Affairs and Northern Development), and George Floyd (Arctic Sciences Ltd.) provided thoughtful suggestions regarding the rating system. George Floyd designed the computer database and mapping system and Susan Ball (Interact Research & Development Ltd.) digitized and plotted the computer-drawn maps. Information and assistance were received from Michael Kingsley, Tom Strong and Patt Weaver (Dept. of Fisheries and Oceans, Western Region), Bill Koski, Gary Miller and John Richardson (LGL Ltd.), and Wendy Calvert (Canadian Wildlife Service). Irene Sipila did an excellent job of word-processing the manuscript. Sharon Thomson (Institute of Ocean Sciences) provided technical editing and assistance in publishing.

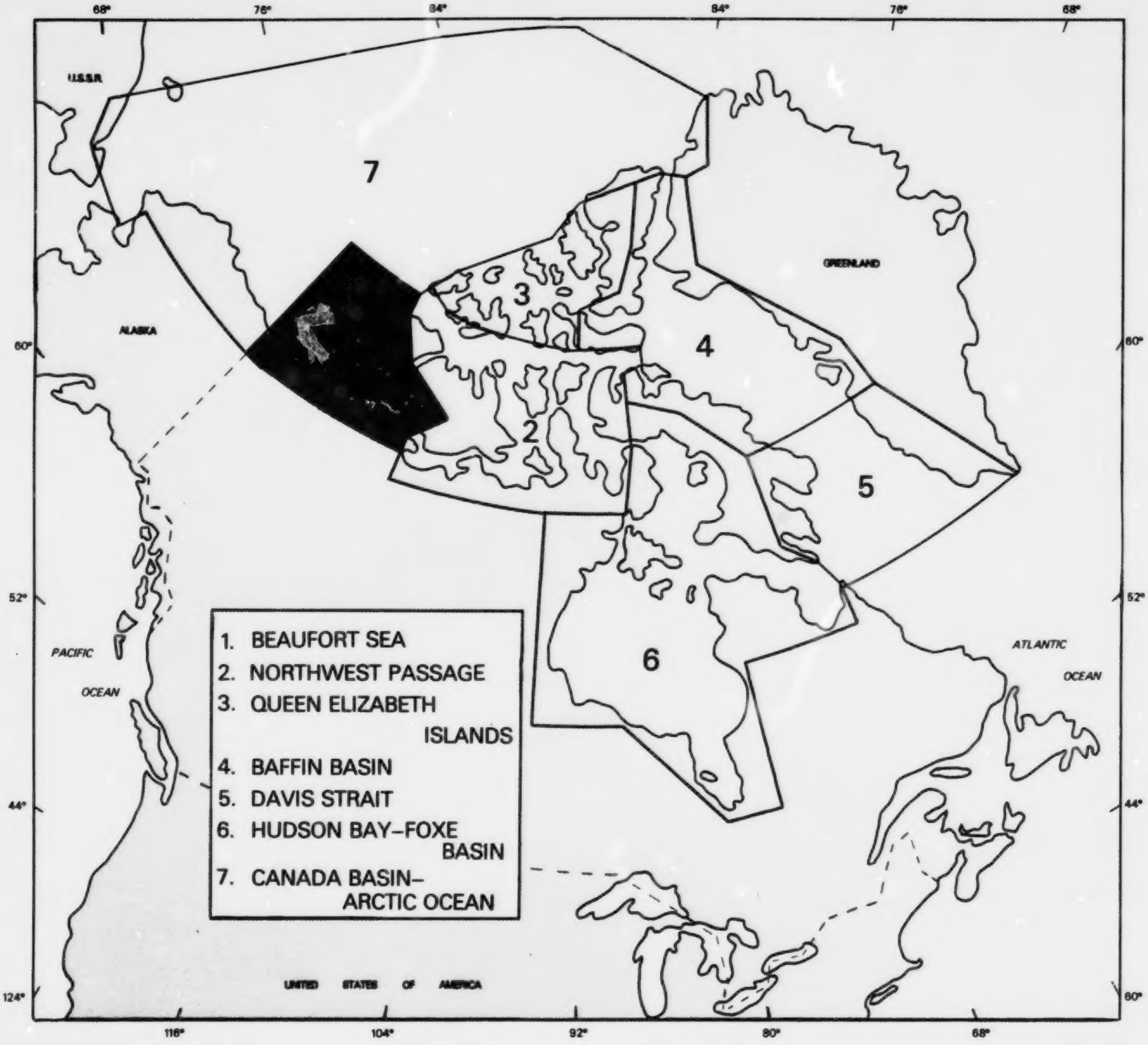
Funds for this work were provided by NOGAP (Northern Oil and Gas Action Plan), Dept. of Indian Affairs and Northern Development, and Dept of Fisheries and Oceans.

ARCTIC DATA COMPILATION AND APPRAISAL

VOLUME 10

BEAUFORT SEA: BIOLOGICAL OCEANOGRAPHY - WHALES

1848 to 1983


68°
76°
84°
84°
76°
68°
U.S.S.R.
7
GREENLAND
3
ALASKA
4
2
5
PACIFIC
OCEAN
6
ATLANTIC
OCEAN
1. BEAUFORT SEA
2. NORTHWEST PASSAGE
3. QUEEN ELIZABETH ISLANDS
4. BAFFIN BASIN
5. DAVIS STRAIT
6. HUDSON BAY–FOXE BASIN
7. CANADA BASIN– ARCTIC OCEAN
UNITED STATES OF AMERICA
60°
52°
44°
124°
60°
52°
44°
60°
116°
104°
92°
80°
68°

This inventory includes data collected on whales within the shaded area. Other inventories in this series are available for the indicated study areas.

Volume 10: Beaufort Sea: Whales

VOLUME ABSTRACT

This data report is an inventory of measurements and observations of white whales, bowhead whales, gray whales, harbour porpoises, narwhal, and killer whales in the Beaufort Sea and Amundsen Gulf. Measurements most commonly reported concern numbers, identification, movements, morphometrics, age, behaviour, food, and reproduction. Organization within this inventory is by data set (measurements and observations made by one group of people, for a particular purpose, generally within one year). In all, 143 data sets were inventoried for the 1848 to 1983 period. Times and locations of sampling efforts are listed in tables and also are shown on computer-drawn maps. Sampling methodology and intensity, whale measurements and observations obtained by species, and concurrent biological, physical, and chemical measurements are described in the tables. A five-level rating system, based on sampling methodology, is outlined and has been applied to each measurement in each data set as a rough indication of the data's reliability. Data sets are indexed according to geographic coverage, study methods, species, measurements and observations made by category, and published references. The form, location, and availability of original data is given if known.

Key words: Amundsen Gulf, Beaufort Sea, data, inventory, porpoises, whales.

1. INTRODUCTION

This inventory contains 143 data sets which have or could have information on whales in the southeastern Beaufort Sea and Amundsen Gulf area for the period 1848 to 1983. Two species of whales reside in this area during the open-water period: white whale (*Delphinapterus leucas*) and bowhead whale (*Balaena mysticetus*). Four other species of whales have been recorded infrequently in the same area: gray whale (*Eschrichtius robustus*), killer whale (*Orcinus orca*), harbour porpoise (*Phocoena phocoena*) and narwhal (*Monodon monoceros*).

The data examined were in various forms. Sets of original data were examined if available. Data in both published and unpublished reports and papers were also inventoried. To locate additional data sources, questionnaires were sent to 47 individuals or institutions in Canada and the U.S.A. requesting particulars of original data. Some questionnaires were followed up by telephone queries.

This inventory provides the following details of each study: time and location, agencies involved, specific whale measurements/observations and concurrent measurements made, study methods, and sampling effort. Reliability ratings are given for each whale measurement/observation in each data set.

This is an ongoing project. Information on additional data sets, and errors and omissions in this catalogue should be submitted in writing to the issuing institutes.

2. STUDY AREA

The study area is the Beaufort Sea Region. It includes all marine areas between 117°W and 141°W, and between 68°N and 76°N, except for M'Clure Strait and the northern half of Prince of Wales Strait. Minto Inlet and Prince Albert Sound are included.

Subregions referred to in this inventory and indicated on Figure 2.1 are: Mackenzie Shelf (called Mackenzie/Tuktoyaktuk Shelf and Tuktoyaktuk Continental Shelf in other inventories), Continental Slope, Canada Basin, Amundsen Gulf, and Banks Island Shelf. Specific locations, such as Shallow Bay and Eskimo Lakes, are also shown on Figure 2.1. Beaufort Coast refers to areas from 0 to 16 km from shore, excluding bays.

Whale harvest studies seldom indicate a specific hunting area. For bowhead harvest data, the area searched was assumed to be the Beaufort Coast, Mackenzie Shelf, Continental Slope and Amundsen Gulf, unless more specific information was available. For recent white whale harvest data, the area searched was assumed to be Mackenzie Bay, Kugmallit Bay and East Mackenzie Bay, unless otherwise specified.

3. DATA COVERAGE

This inventory includes every known whale study conducted prior to, and including, 1983. Most studies which included aerial surveys for seals also obtained incidental observations of whales and so these studies are inventoried. Many of the bird studies done by the Canadian Wildlife Service (1968-1983) may have obtained incidental whale observations, but these studies are not included in this inventory because the basic information on timing, locations, etc. is not readily available.

3.1 TEMPORAL COVERAGE

The number of studies conducted each year in the Beaufort Sea area has varied from zero (during many of the years prior to 1951) to 12 (during 1980). Comparing the number of studies conducted during five-year periods, the most intense period for which details of the studies are readily available was 1979-1983 (Fig. 3.1). The first study was in 1848. Studies conducted prior to 1908 were reconnaissance vessel surveys by whalers or explorers; the logbooks and journals that survive from this period are available only in American and British museums and universities and were not examined for this inventory. Thus, the study effort prior to 1908 is under- represented in Figure 3.1.

Few studies occurred during the periods from 1909 to 1953. The studies that were undertaken during this time were most often expeditions to determine the natural history (flora and fauna) of the area. Natural history expeditions continued through the 1950s.

Interest in the Arctic increased in the 1950s and 1960s. Distant Early Warning sites were established and maintained, and the Department of Indian and Northern Affairs (now Indian Affairs and Northern Development) sent researchers into the field to interview residents and to survey uninhabited areas. The first scientific study of whales was in 1954. In 1967, the Game

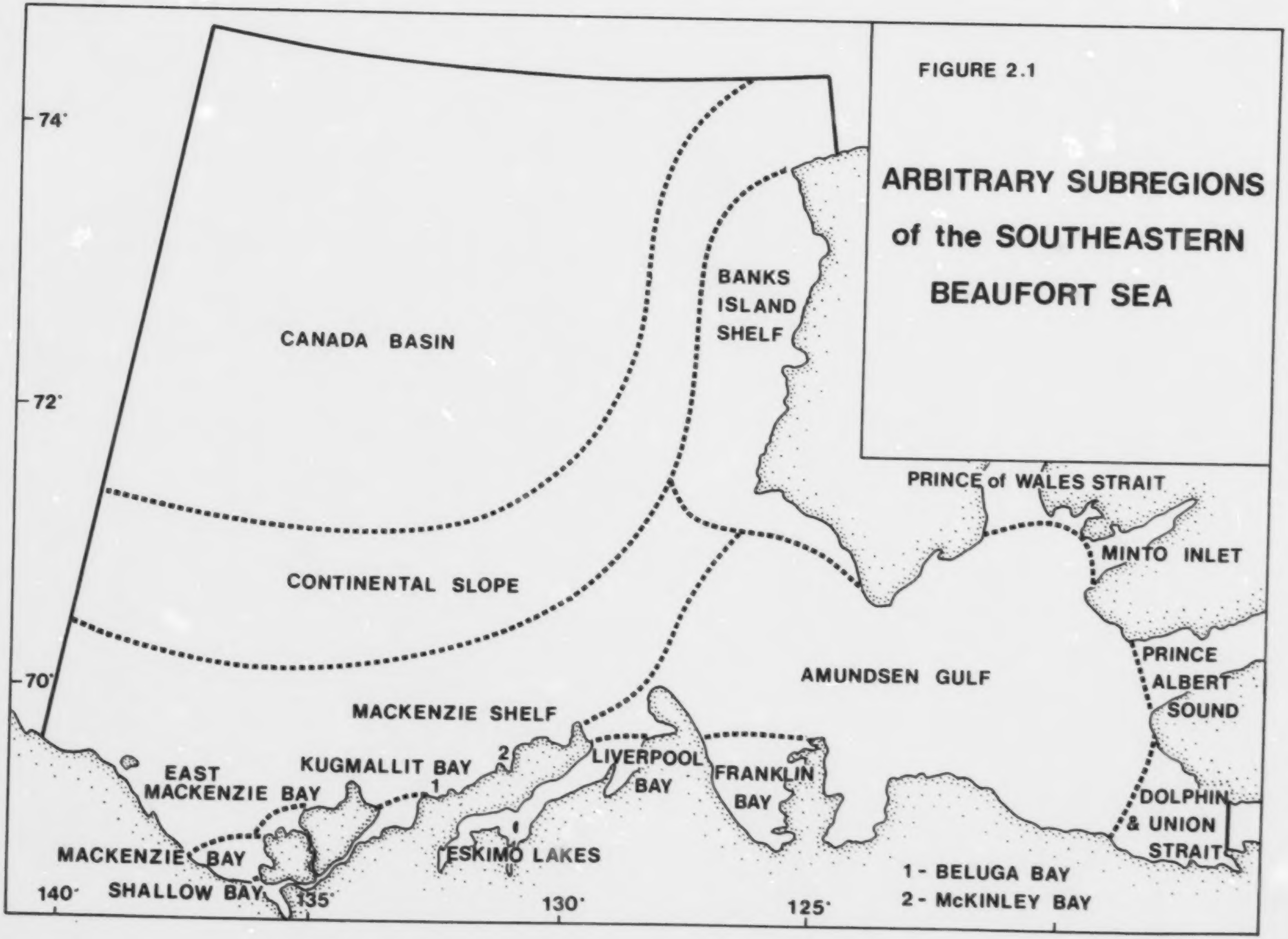

74°
72°
70°
140°
135°
130°
125°
CANADA BASIN
CONTINENTAL SLOPE
MACKENZIE SHELF
BANKS ISLAND SHELF
AMUNDSEN GULF
PRINCE of WALES STRAIT
MINTO INLET
PRINCE ALBERT SOUND
DOLPHIN & UNION STRAIT
FRANKLIN BAY
LIVERPOOL BAY
ESKIMO LAKES
KUGMALLIT BAY
EAST MACKENZIE BAY
MACKENZIE BAY
SHALLOW BAY
1
2
1 - BELUGA BAY
2 - McKINLEY BAY

FIGURE 2.1

ARBITRARY SUBREGIONS of the SOUTHEASTERN BEAUFORT SEA

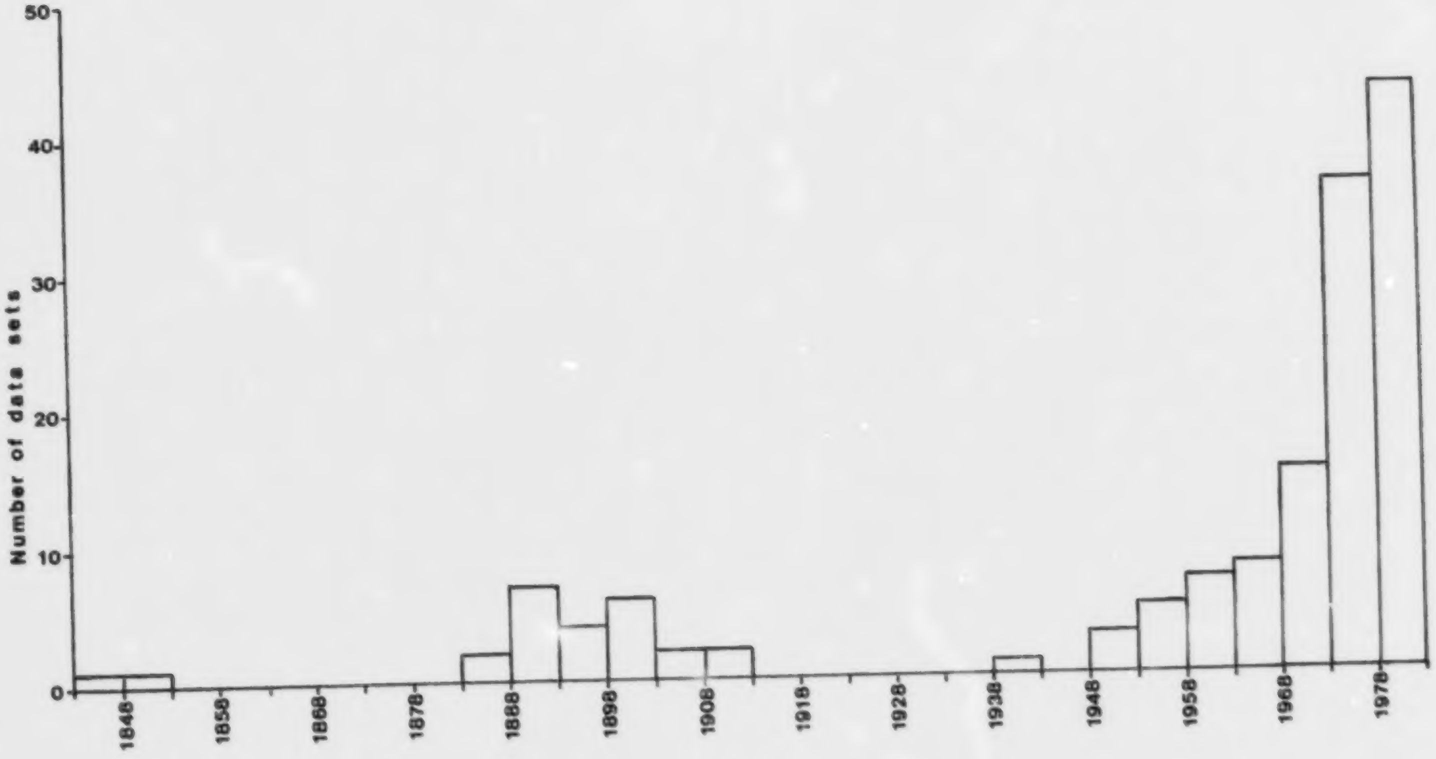


Figure 3.1 Number of studies conducted in the Beaufort Sea and Amundsen Gulf area, by five-year intervals.

Management Service (now Fish and Wildlife Service) of the Government of the Northwest Territories started a program to encourage white whale harvesting in the area; this program included taking measurements of the landed whales. In 1980, under the Department of Fisheries and Oceans, the harvest monitoring program started to pay monitors in each of the harvest areas to record and measure the harvested whales.

Oil and gas exploration in the marine areas started in 1972 and the first environmental assessment program was conducted the same year. Many of the studies done since 1972, including several of white whales in the Mackenzie Estuary, have been funded by the oil industry. In 1980, numerous bowheads were observed near an active industry site. Because the bowhead whale is an endangered species, several studies have been undertaken to determine bowhead distribution and abundance in the offshore areas. Some of these studies were funded by the Government of the United States of America.

Temporal coverage varied among the seasons (Fig. 3.2). Most of the effort was concentrated in the open-water season (June-October). The early whaling expeditions often over-wintered in the area and maintained a watch for whales, at least at the over-wintering sites, throughout the year. Polar bear and bird studies, which often included incidental whale observations, occurred during the period before ice break-up.

3.2 GEOGRAPHIC COVERAGE

Most effort has been expended in the estuarine areas; the farther an area is from shore, the fewer the studies which included that area. Only 14 of the 143 studies included the general region identified as the Canada Basin on Figure 2.1; all of these studies were conducted after 1973. The Continental Slope, Mackenzie Shelf and Amundsen Gulf areas were surveyed frequently in the 1800s and early 1900s by whaling crews hunting for bowhead whales, and in recent years, by scientists studying the same species. Of the 143 studies, 116 were conducted, at least in part, in estuarine areas.

3.3 DATA COVERAGE BY STUDY METHOD

The most common observation platform was an aircraft; reconnaissance aerial surveys were included in 62 studies and systematic aerial surveys, in 37. (Many studies included both reconnaissance and systematic aerial surveys.) Vessels were used as survey platforms during 36 studies which included reconnaissance surveys, during eight studies which included watches from stationary points, and during five studies which included tagging. All tagging studies also involved reconnaissance vessel surveys to locate whales. Shore was used as a platform during 14 studies, and ice, during just three studies.

Hunters' interviews (a category which includes whalers' interviews) were conducted as part of 47 studies. For four studies, whalers' records are indicated as the study method; these studies probably included both whalers' interviews and reconnaissance vessel surveys. Field examination of harvested whales was included in 41 studies. Incidental reports were indicated as part of 33 studies.

For 15 studies, no method was specified; most of these studies probably included hunters' interviews and/or incidental reports. For several studies,

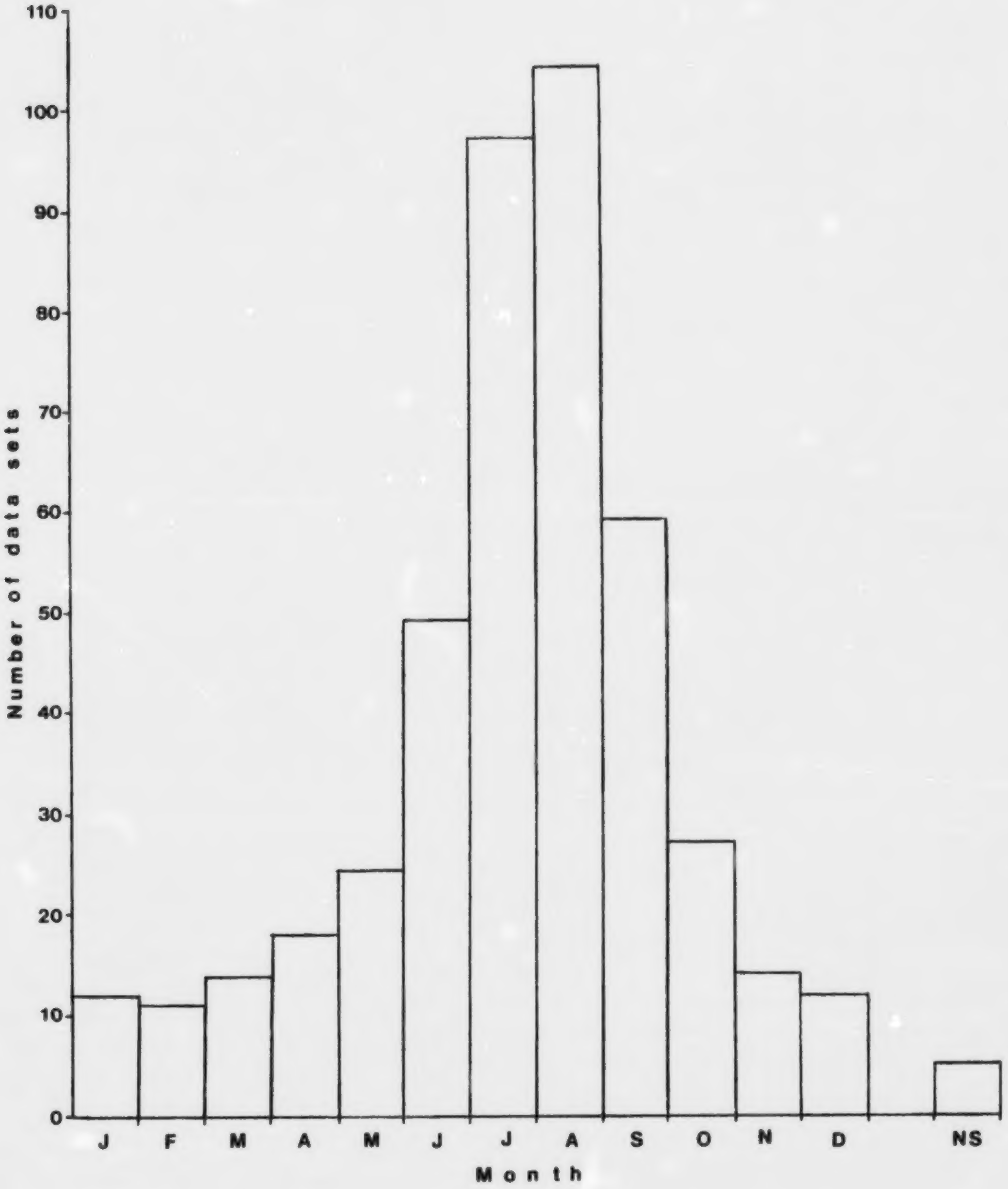


Figure 3.2 Seasonal distribution of sampling effort in the Beaufort Sea and Amundsen Gulf area.

the methods indicated were incomplete. The above tallies should be taken as approximations.

3.4 DATA COVERAGE BY MEASUREMENT CATEGORY

Of the 132 studies which obtained information on whales, almost all (131 studies) reported information on number. Similar numbers of studies reported information on morphometrics (60 studies), age (45), food (40), movements (64), and behaviour (42). Reproductive measurements were included in 30 studies, and measurements of (or observations on) parasites, in only 10 studies.

4. STUDY METHODS

Of the data sets for which the methods used are known, most involved more than one type of method. A few studies used as many as five different types of methods.

4.1 AERIAL SURVEYS

The procedures followed during reconnaissance and systematic aerial surveys were very similar, and usually only the determination of the placement of the flight line differed. Many studies involved a reconnaissance survey along the shore to the start of the systematic survey lines and than another reconnaissance survey after the systematic survey lines were completed.

Most aerial surveys were conducted using fixed-wing aircraft; helicopters were used in a few studies. The most commonly-used aircraft were the deHavilland Twin Otter, the Cessna 185 and 337, and the Britten-Norman Islander. A Bell 205 was used in four studies, and a Bell 206, in four.

Survey altitude varied from 24 to 915 m during reconnaissance surveys, and from 45 to 457 m during systematic surveys. During most studies, the methodology specified a set altitude, but deviations from this altitude occurred when there was low-lying fog/cloud. Studies undertaken specifically to observe seals or whales usually involved flights at altitudes of 152 or 305 m; during some flights, an altitude of 457 or 610 m was maintained. Studies undertaken to examine bird distribution involved flights at much lower altitudes, such as 45 or 90 m. Plane speeds varied from 145 to 398 km/h. As with altitude, a pre-determined plane speed was set. Inadequate or excessive compensation for wind resulted in lower or higher plane speeds than planned. During a study involving both reconnaissance and systematic aerial surveys, there was more variation in both altitude and in plane speed during the reconnaissance surveys than during the systematic surveys. In earlier studies involving aircraft flights, no planned transect widths were indicated. In more recent studies, transect width varied from 400 to 2000 m, but usually was 1600 to 2000 m.

Aerial photography was a component of eight studies, the first one in 1981. Still photographs were used to obtain certain morphometric measurements, such as total length and snout-to-blowhole length. Five studies included still photographs; one of these studies also obtained stereo images for three-dimensional analyses. Videotapes of whale behaviour were made as part of three studies. A few still photographs were taken during studies conducted prior to 1981, but the photographs did not extend the range of the study but were merely used to verify a visual observation.

Still photographs were taken using both 35 and 70 mm cameras. One study indicated that 105 and 200 mm lenses were used; the other studies did not specify the lenses used. The films used included Ektachrome 200, Vericolor III, and Ektachrome Professional. Single pictures were examined using a dissecting microscope with 16, 25 or 32X magnification; stereo pairs were examined using a Matra Traster Analytical Plotter. Video recordings were obtained using a handheld color camera (JVC-CV-0001) which was connected to a portable videocassette recorder (Sony SLO-340).

Hydroacoustic techniques were included in several whale behaviour studies. Sonobuoys were dropped from an aircraft as it circled a group of whales, portable FM radios with frequency converters were used to pick up the sounds from the sonobuoys, and the incoming sounds were recorded by stereo cassette recorders. The audio tapes were digitized using an analog-to-digital converter before being analyzed. The analysis was done using a Spectral Dynamics SD301C real-time analyzer and a Tektronix 513 or 5111 memory oscilloscope or Kay 6019A Spectrograph. One study involved playing back noises from industrial operations to observe the reactions of bowhead whales. The playback experiments were done using a J-11 endless loop cassette tape recorder and a model H56 reference hydrophone. This equipment was borrowed from the U.S. Navy Underwater Sound Reference Detachment.

4.2 ICE WATCHES

Three studies included ice watches; two of these studies were conducted in the late 1800s or early 1900s by whalers or naturalists. In a recent study, ice watches were used to monitor the health of a group of white whales trapped by ice in Eskimo Lakes. Hydroacoustic techniques were used during this study, but no details are available. Specific details on watch site, length of individual watches, rotation of personnel, etc. are not available for any of the studies.

During one study, ice was used as a platform to implant a 12 ga. Discovery Mark tag modified to include a seven-foot dacron streamer into a bowhead whale. This animal was located during a reconnaissance aerial survey; no ice watch was conducted.

4.3 SHORE SURVEYS AND WATCHES

Of the 15 studies that used the shore as an observation platform, five were conducted by whalers hunting bowheads or naturalists doing general surveys of the area's fauna. Several of the studies that included shore watches had their primary objective as making bird observations; the sites were located along migratory bird pathways. Four studies included continuous watches during specified time intervals. Details on methods are not available for the other studies.

Hydroacoustic techniques were included in three of the studies. The equipment and procedures used were the same as those described in section 4.1.

4.4 VESSEL SURVEYS AND WATCHES

Whale observation studies were conducted using a variety of vessels, from 400-ton sailing ships and ice breakers and drillships to 14 m seiners and ketches to 6 m canoes and 5 m aluminum boats. The most extensive vessel reconnaissance surveys were conducted by the whalers operating in the area during the late 1800s and early 1900s. Vessel surveys were also used by early naturalists exploring the area. A few of the recent studies included reconnaissance vessel surveys to monitor bowhead whale behaviour. Stated vessel speeds ranged from 13 to 19 km/h, but most studies did not specify a vessel speed. No study indicated the height above sea level of the observation platform.

Reconnaissance vessel surveys were also used during four studies to locate and tag whales. The techniques used involved either tuna-type or barnacle-type (radio) tags with coloured streamers implanted using a drug immobilization rifle. None of the tagged whales was relocated once initial contact was lost.

4.5 HUNTERS' INTERVIEWS

Hunters' interviews includes interviews with the whalers around the turn of the century. Few details are available concerning the procedures used during historical interviews. During several of the recent studies, a standard format was used for recording information. Details were recorded on the weather, time spent hunting, camp where hunters were staying, number and names of hunters, whether or not whales were seen, number of whales struck, lost and landed, calibre of gun used, number of shots fired, and relationship between time of harpooning and time of shooting. The questionnaires were filled in by a specified monitor at each of the whaling camps, and a separate form was used for each hunting event. Other recent studies only provided information on where the interviews occurred, without any details provided on the questions asked.

4.6 WHALERS' RECORDS

Some studies summarized the results of the voyages of several whaling ships. When enough information is available, the individual voyages are listed as separate data sets. If the summary report contains information additional to that listed for the individual voyages, the summary paper is identified as a distinct data set and whalers' records is the method indicated. There are four such data sets in this inventory. For two of these studies, no additional information on methods is given. The other two studies indicate the procedure used to select which voyages were included in the study and which were not, the problems encountered in extracting the information, and how decisions were made when doubt existed as to the actual outcome, locations, etc.

4.7 EXAMINATION OF HARVESTED WHALES

Methods used for examining landed whales in the field or sections or parts of whales in the laboratory were often well defined. The exact measurement obtained (e.g., following the curvature of the body or straight-line) was specified, the units used were standardized, the equipment was described, and storage procedures were detailed, if applicable. During the studies conducted prior to 1981, Imperial units (e.g., inches, pounds) were usually used. Metric units (e.g., metres, centimetres, grams) were common after 1981. Accuracy and precision of the measurement procedure were seldom indicated.

4.8 INCIDENTAL REPORTS

Many studies included observations reported by people not directly involved in the studies. Generally no details were given on the people interviewed, the platform from which the observations were made, and the observation conditions during the sighting. The most serious omissions with most incidental reports were details on the person's skill or experience in making whale observations, the duration of the observation period, and the extent of the area searched.

5. GENERAL INVENTORY LAYOUT

5.1 DATA SETS

A data set has been defined as the measurements and observations obtained during one study or one voyage for a particular purpose, using the same research team and similar methodologies, usually within one calendar year. Each data set has been assigned a unique six-digit identification number. The first two digits refer to the last two digits of the year during which the observations were commenced (e.g., 78-xxxx commenced in 1978). The last four digits are arbitrarily assigned to that particular data set. Data sets of voyages during the 1800s have been designated by a subscript (e.g., $_{18}$50-xxxx is a voyage starting in 1850). A particular data set number applies to the same data set throughout all of the inventories of the Arctic Data Cataloguing and Appraisal Series. Since all data sets do not include all types of data (i.e., physics, chemistry, whales, seals, fish, benthos, and plankton), there are gaps in the sequence of data set numbers in this inventory.

5.2 INVENTORY ORGANIZATION

All data sets were treated as follows. First, the following information was obtained:

- collecting agency;
- funding agency;
- time period within the area boundaries; and
- geographical coverage.

Each data set was then carefully examined to determine which whale species were observed and which specific whale measurements and observations were made. Each specific measurement was assigned to one of the following measurement categories: Number, Identification, Morphometrics, Age (and colour), Reproduction, Food, Parasites, Movements, Behaviour, and Other. The specific whale measurements included in this inventory are given, by category, in Table 6.1 in section 6.3.

The Data Inventory Table 1 format is standard for all biological inventories. The general study parameters, the species observed, and the specific whale measurements made, by category, are detailed. In addition, concurrent measurements are indicated by discipline (biology, chemistry, and physics). Concurrent biological measurements are organized by the following taxonomic groups:

- microbes;
- phytoplankton;
- zooplankton;
- zoobenthos;
- phytobenthos;
- epontics;
- anadromous fish;
- marine fish;
- birds;
- ice-associated mammmals;
- terrestrial mammals; and
- pinnipeds.

Concurrent chemical and physical measurements are organized by:

- atmosphere;
- ice;
- water column;
- suspended particulates;
- sediment; and
- biota.

Data Inventory Table 2 gives detailed information on study methods and sampling effort for each measurement in each data set, and is presented species by species. Each measurement for each species in a data set has been rated, using evaluation criteria outlined in section 6.3.

Data Inventory Table 3 gives the specific times and locations and sampling intervals for all known surveys and watches.

Maps are provided to illustrate the geographic coverage of systematic and reconnaissance aerial surveys and reconnaissance vessel surveys by bi-monthly periods. Survey lines were digitized using dBase III and an IBM-compatible micro-computer. The information was stored on a floppy disc, and then changed to ASCII format for the IOS Univac computer which plotted the information onto Lambert Conformal Conic projection maps of the entire study area (scale of 1:7 000 000). To avoid confusion, only one data set is plotted on each map; data sets require more than one map if more than one type of survey was done or if the study period extended beyond any two-month period. Insufficient information is available to map survey lines for some data sets.

Indexes are given near the end of this inventory. Data sets are indexed according to geographic coverage, species, study methods, and specific whale measurements obtained. The Reference Index also includes the form, availability, and location of the original data, and the person to contact, if known. Appendix 1 gives additional remarks concerning some of the data sets, and Appendix 2 lists addresses for the institutions.

5.3 SAMPLE USE OF THE INVENTORY

Example 1: Searching for information on a specific whale measurement (e.g., breaching).

Step 1. Begin search by using the Measurement Index and record the identification (I.D.) numbers of the data sets listed for that measurement.

Step 2. Using the I.D. numbers, examine those data sets noted in Step 1 in Data Inventory Tables 1 and 2 to obtain information on who did what, where, when, and how.

Step 3. Again, using the I.D. numbers, consult the Reference Index for reports or publications which contain the desired information and the form, location, and availability of the original data.

Example 2: Searching for information for a specific geographic area (e.g., McKinley Bay).

Step 1. Begin search by using the Geographic Index and record the identification (I.D.) numbers of data sets listed for that area.

Step 2. Using the I.D. numbers, examine those data sets noted in Step 1 in Data Inventory Table 1 to obtain information on the species observed and the sampling period.

Step 3. Again, using the I.D. numbers, consult the Maps for those data sets noted in Step 1 to quickly determine which areas were sampled.

Step 4. Consult the Reference Index for reports or publications which contain the desired information and the form, location, and availability of the original data.

6. APPRAISAL OF STUDY METHODS

6.1 Background and Rationale

In order to compare biological data collected from different areas, and/or during different seasons or years, and/or before and after environmental perturbations, it is necessary to assess the precision and accuracy of the measurements. Precision is the measure of the random variation of a method; it can be expressed as a standard deviation, e.g., if a whale length is 350 ± 5 cm, the 5 cm indicates the level of precision. Improved precision results in smaller differences between repeated assessments of the same measurement on the same animal or structure. Accuracy is the measure of how close the determined value is to the true value of a measurement, and is the systematic variation of a method. For example, the measured gonad weight will always be higher or always be lower than the actual weight if the scale instrument used is zeroed incorrectly.

In the physical and chemical sciences, multiple measurements are often made and the precision of the method can be easily determined. Standards are available to determine the accuracy of the method, although relating chemical standards of one chemical composition and structure to samples containing the same chemical in a different form or in several forms is often difficult. Physical and chemical laboratories develop protocols for sampling and analytical procedures and assess the quality of the methods at regular intervals to ensure the best results possible.

Some biological measurements are simple physical measurements (e.g., weight and length measurements). The precision and accuracy of the methods used to obtain these measurements usually can be determined.

Most biological measurements are observations or a combination of observations and physical measurements. For example, to measure tail width, the investigator has first to know where the measurement should be taken on the tail (observation), and then to obtain the width (physical measurement). Because the first step of the procedure is subjective, any assessment of precision and accuracy is also partially subjective.

The operational unit in this catalogue is the "measurement". Each reported measurement is what actually was recorded (e.g., number of whales on an aerial transect line) and not a derivation of the measurement (e.g., whale abundance). Each type of measurement was appraised separately in each data set.

Appraisal criteria were established for each measurement type; the criteria are factors known or believed to affect the reliability of a measurement type obtained using a particular method. All criteria pertinent to a particular measurement type obtained by a particular method were applied to measurements obtained by that method. A rating score of 0 to 4 was then applied. Because the data, like a chain, are only as strong as the weakest link, the score is the lowest of the scores applied according to the individual criteria.

Data reliability demands that the data are repeatable, not only by the original investigator, but also by anyone else wishing to repeat the measurements. For this to be possible, the original work must have been performed in a consistent, defined manner and the investigator must have provided a complete, detailed description of all sampling and analytical methods. All terms and units must be precisely defined.

The rating scheme does not depend on the use or application of the data. For example, age measurements of 15 whales (even if the measurements have a high reliability rating,) are probably not sufficient to describe the age structure of a whale population. These data may adequately describe the age structure of a harvest, however. The rating may suggest the purposes for which the data can be used with confidence. Data may be useless for some applications if the sample is not representative of what exists in the total area in nature. For example, one may count with great accuracy and precision the number of whales seen along a given transect line from a given aircraft at a particular altitude and speed. But, if many animals dive before they are counted, the sample will not be representative, and the results will be of limited use in describing the whale population actually in the area. Ratings are applied independent of the representativeness.

"Identification" is a measurement which was not rated because of its subjective nature. Although there are published taxonomic keys against which a specimen can be compared, field identification depends entirely on the interpretation of the investigator of how well the organism fits a particular description. It must be understood that correct identification of whales is crucial to all other subsequent measurements and observations, and that data rated as highly reliably in this inventory may be totally useless if the identification is incorrect.

6.2 DEFINITION OF THE RATING SYSTEM

Study methodologies have been appraised according to a five-level scale defined as follows:

RATING SCORE	DEFINITION
0	Data are found or judged to be wrong.
1	Data are suspect and probably not internally consistent; trends or patterns within the data are likely not real.
2	Insufficient information is provided to assess the data; the data were not or could not be investigated.
3	Data are internally consistent; patterns or trends within the data are probably real, but comparison with other data sets may be difficult or impossible.
4	Data are internally consistent and are sufficiently standardized or tied to a reference that comparison with other data at this rating score should be possible. Data may not be accurate in an absolute sense.

Because a "2" rating is not better than a "0" or "1" rating, the scheme is not truly hierarchical. Ignoring the 2 rating, however, the scheme is hierarchical (0, 1, 3, 4). The scheme is presented this way to provide continuity with other catalogues in the series.

The rating scheme is intended to be a guide to appraisal of study methodologies and not an absolute statement of data quality. An ideal rating system would use only objective rating criteria, but due to the nature of some biological measurements and observations, this is not always possible. Some measurements and observations involve a high level of subjective judgment or interpretation on the part of the investigator.

6.3 RATING METHODS USED FOR OBTAINING WHALE DATA

Many whale measurements are highly subjective, regardless of the methods used, because both the observer and the observed whale change over time. Whales are very mobile animals and can exhibit a wide range of behaviour. Observers are often remote from the animals, and most of the analysis or interpretation is done in the observer's mind before any information is recorded. Human perception is dependent on state of alertness, internal and external stress, and medical fitness; all of these are difficult to measure and can vary even over a short time period. Since no "sample" is taken that can be analyzed and re-analyzed, subsequent results cannot be compared. Thus, at best, only relative levels of precision and accuracy can be assigned.

Recently, some types of whale measurements and observations have been permanently recorded using devices such as cameras and tape recorders. If good-quality photographs and audiotapes are obtained, then the "samples" can be re-examined and a level of precision determined. Of course, the method of getting the data may affect the information obtained.

For this inventory, rating charts were used to standardize and document the rating procedure. When rating a measurement or observation, the appropriate chart was selected and questions asked on the methods used according to the order on the chart. The rating procedure continued until all the questions on the chart had been asked and answered and a data rating assigned. The final rating for a given measurement was the lowest value assigned to any of the answers to the questions. If different values for one measurement type (e.g., different total length values) in a data set received different ratings, because the methods were somehow different, then both ratings were assigned. Table 6.1 indicates which Rating Chart was used to rate each of the types of measurements. The Rating Charts follow Table 6.1.

Table 6.1

Index for Rating Charts

Measurement/Observation	Chart	Measurement/Observation	Chart
Number			
# seen/location	A	# struck and lost alive	B
#/aerial transect line	A	# struck, killed and lost	B
# of calves	A	# dead/location	A
#/group	A	#/distance from aircraft	A
# landed	B	#/distance from vessel	A
# struck and lost	B	#/distance from land	A
Identification			
tag #	Not rated		
Morphometrics			
total length	C	zygomatic width	C
snout-to-blowhole length	C	premaxillae width	C
snout-to-anus length	C	temporal fossa length	C
snout-to-genital slit length	C	temporal fossa height	C
snout-to-umbilicus length	C	tip rostrum to nares	C
snout-to-flipper length	C	tip rostrum to pterygoid	C
snout-to-eye length	C	head length	C
snout-to-ear length	C	gum length	C
baleen length	C	braincase width	C
flipper length	C	length toothrow	C
flipper width	C	# teeth/jaw	D
tail width	C	# baleen plates	D
girth behind flippers	C	blubber thickness	C
maximum girth	C	baleen weight	D
tusk length	C	lip weight	D
rostrum length	C	tongue-&-lower jaw weight	D
rostrum width	C	blubber weight	D
lip length	C	muktuk weight	D
calf-to-adult length ratio	C	oil weight	D
skull length	C	bone weight	D
maxilla length	C	meat weight	D
mandible length	C	total weight	D
mandible height	C	muktuk volume	D
length symphsis mandibles	C	oil volume	D
breadth across supraorbital processes	C	flipper shape	D
		body deformity	E
Age and Colour			
# of dentine layers	F	bone colour	G
racemization of lens protein	F	blubber colour	G
overall colour	G	scar pattern	G
colour pattern	G	mud on skin	G

Table 6.1 (Continued)

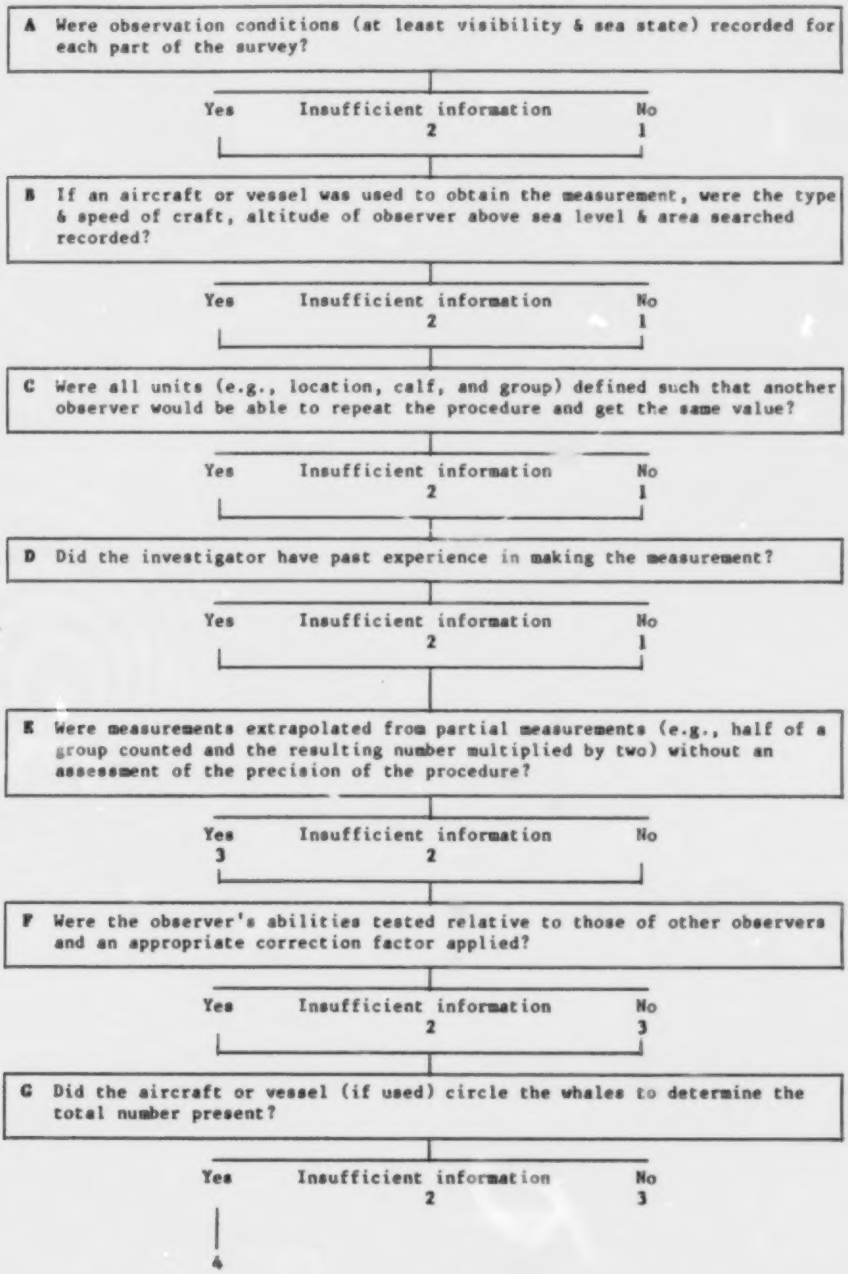
Measurement/Observation	Chart	Measurement/Observation	Chart
Reproduction			
genital structure	H	spermatogenesis stages	I
presence of tusk	H	corpora lutea #	I
gonad length	C	corpora albicantia #	I
gonad width	C	placenta present	H
gonad depth	C	fetus present	H
gonad volume	D	fetus length	C
gonad weight	D	milk present	H
sperm present	I		
Food			
stomach contents	K	defecating	J
presence of birds	J	feeding	J
mud coming from mouth	J		
Parasites			
parasites present	K	metal present	K
Movements			
heading	L	distance between tail beats	M
distance/time	M		
distance/dive	M	swimming under ice	L
Behaviour			
dive time	N	head slamming	O
surface time	N	flipper slapping	O
time between blows	N	gamming	O
# blows/surfacing	N	spy-hopping	O
# surfacings/time	N	porpoising	O
# underwater blows	O	swimming in circles	O
nudges	O	mouth open	O
pushes	O	forward lunges	O
chases	O	rolling on side	O
slaps	O	dive characteristics	O
orientation to others	P	turning at surface	O
orientation to vessel	P	log lifting	O
orientation to aircraft	P	log pushing	O
orientation to waves/wind/ wind rows	P	log clasping	O
		rolling log along body	O
orientation to ice edge	P	mating	O
synchrony among animals	Q	nursing	O
distance between individuals	Q	# calls/whale-hour	R
position in water	Q	# calls/type/time	R
disturbing mud	O	call duration	R
breaking ice with back	O	call frequency spectrum	R
splashing	O	call intensity	R
breaching	O	pulse rate	R
tail slapping	O		

RATING CHART A

MEASUREMENTS

# seen/location
#/aerial transect line
# of calves
#/group
dead/location (omit E & G)
#/distance from aircraft
#/distance from vessel
#/distance from land

QUESTIONS



A Were observation conditions (at least visibility & sea state) recorded for each part of the survey?

Yes — Insufficient information 2 — No 1

B If an aircraft or vessel was used to obtain the measurement, were the type & speed of craft, altitude of observer above sea level & area searched recorded?

Yes — Insufficient information 2 — No 1

C Were all units (e.g., location, calf, and group) defined such that another observer would be able to repeat the procedure and get the same value?

Yes — Insufficient information 2 — No 1

D Did the investigator have past experience in making the measurement?

Yes — Insufficient information 2 — No 1

E Were measurements extrapolated from partial measurements (e.g., half of a group counted and the resulting number multiplied by two) without an assessment of the precision of the procedure?

Yes 3 — Insufficient information 2 — No

F Were the observer's abilities tested relative to those of other observers and an appropriate correction factor applied?

Yes — Insufficient information 2 — No 3

G Did the aircraft or vessel (if used) circle the whales to determine the total number present?

Yes 4 — Insufficient information 2 — No 3

RATING CHART B

MEASUREMENTS

landed (start at E)
# struck and lost (omit D)
struck and lost alive
struck, killed and lost

QUESTIONS

A If an aircraft or vessel was used to obtain the measurement, were the speed of the craft and the altitude of the observer recorded?

Yes | Insufficient information 2 | No 1

B Were the distance of the observer from the event and the observation conditions (at least visibility & sea state) recorded?

Yes | Insufficient information 2 | No 1

C Could an individual hunting event (one hunting party after one whale) be identified and was each event followed through to the end?

Yes | Insufficient information 2 | No 1

D Did the investigator have past experience in recognizing the severity of different types of wounds and the resulting whale mortality?

Yes | Insufficient information 2 | No 3

E Was the hunting party identified, and the date and location of the hunting event recorded?

Yes 4 | Insufficient information | No 1

RATING CHART C

MEASUREMENTS

total length
snout-to-blowhole length
snout-to-anus length
snout-to-genital slit length
snout-to-umbilicus length
snout-to-flipper length
snout-to-eye length
snout-to-ear length
baleen length (omit C)
flipper length (omit C)
flipper width (omit C)
tail width
girth behind flippers
maximum girth
tusk length (omit C)
rostrum length (omit C)
rostrum width (omit C)
lip length (omit C)
calf-to-adult length ratio (omit B & C)
skull length (omit C)
maxilla length (omit C)
mandible length (omit C)
mandible height (omit C)
length symphsis mandibles (omit C)
breadth across supraorbital processes (omit C)
zygomatic width (omit C)
premaxillae width (omit C)
temporal fossa length (omit C)
temporal fossa height (omit C)
tip rostrum to nares (omit C)
tip rostrum to pterygoid (omit C)
head length (omit C)
gum length (omit C)
braincase width (omit C)
length toothrow (omit C)
blubber thickness
gonad length (omit C)
gonad width (omit C)
gonad depth (omit C)
fetus length

QUESTIONS

A If the measurement was obtained from an aerial photograph, were the altitude & speed of the aircraft, & the focal length, shutter speed & format size of the camera recorded?

Yes	Insufficient information	No
	2	1

B Were measurements extrapolated from partial measurements (e.g., total length extrapolated from headless length) without an assessment of the precision of the procedure?

Yes	Insufficient information	No
1	2	

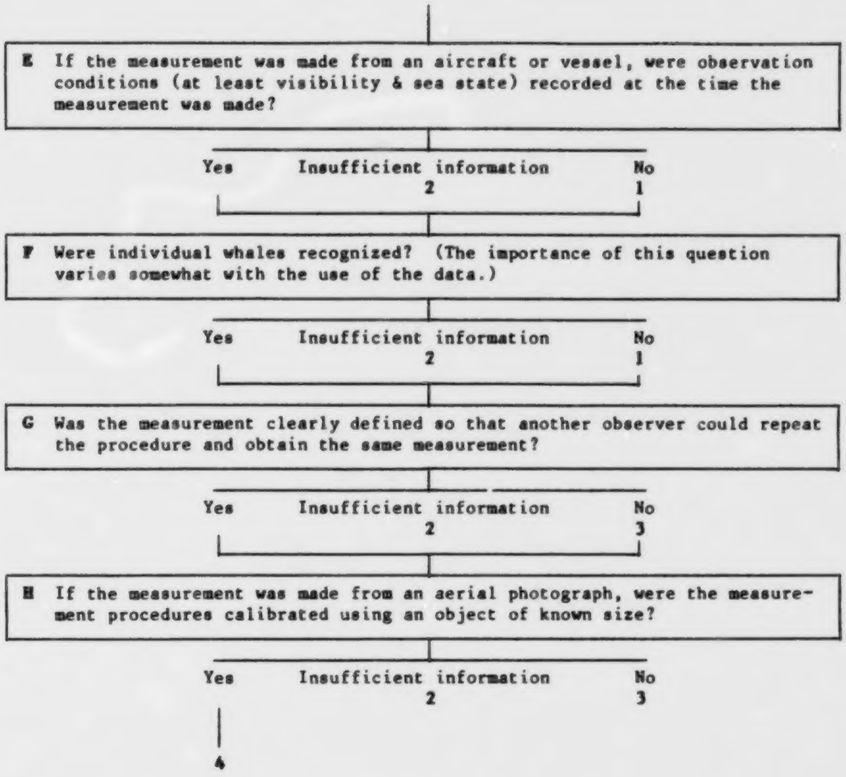
C Was the position of the whale's body (such as flexing) considered and an appropriate correction made, if necessary?

Yes	Insufficient information	No
	2	1

D Was an appropriate instrument used to make the measurement and were appropriate units used?

Yes	Insufficient information	No
	2	1 or 3 (calf-to-adult length ratio only)

continued on next page



E If the measurement was made from an aircraft or vessel, were observation conditions (at least visibility & sea state) recorded at the time the measurement was made?

Yes
Insufficient information
2
No
1

F Were individual whales recognized? (The importance of this question varies somewhat with the use of the data.)

Yes
Insufficient information
2
No
1

G Was the measurement clearly defined so that another observer could repeat the procedure and obtain the same measurement?

Yes
Insufficient information
2
No
3

H If the measurement was made from an aerial photograph, were the measurement procedures calibrated using an object of known size?

Yes
Insufficient information
2
No
3
4

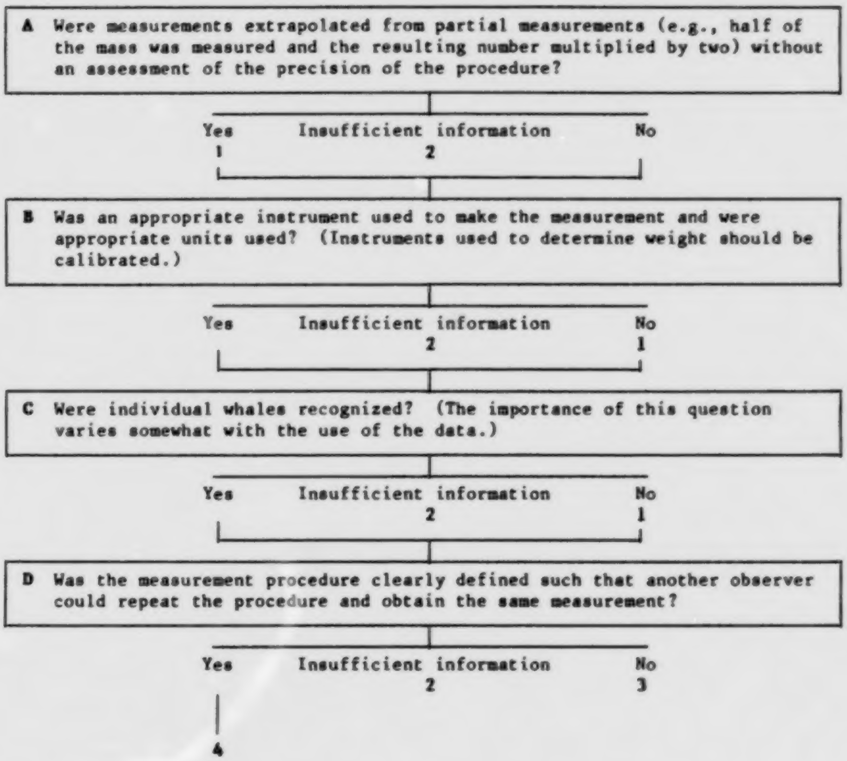
RATING CHART D

MEASUREMENTS

baleen weight
lip weight
tongue-and-lower jaw weight
blubber weight
muktuk weight
oil weight
bone weight
meat weight

total weight
muktuk volume
oil volume
gonad volume
gonad weight
flipper shape (start at B)
# teeth/jaw (omit B)
# baleen plates (omit B)

QUESTIONS



A Were measurements extrapolated from partial measurements (e.g., half of the mass was measured and the resulting number multiplied by two) without an assessment of the precision of the procedure?

Yes
1
Insufficient information
2
No

B Was an appropriate instrument used to make the measurement and were appropriate units used? (Instruments used to determine weight should be calibrated.)

Yes
Insufficient information
2
No
1

C Were individual whales recognized? (The importance of this question varies somewhat with the use of the data.)

Yes
Insufficient information
2
No
1

D Was the measurement procedure clearly defined such that another observer could repeat the procedure and obtain the same measurement?

Yes
4
Insufficient information
2
No
3

RATING CHART E

MEASUREMENTS

body deformity

QUESTIONS

A If the measurement was made from an aircraft or vessel, were observation conditions (at least visibility & sea state) recorded?

Yes
Insufficient information 2
No 1

B Were individual whales recognized?

Yes
Insufficient information 2
No 1

C If the measurement was made from an aircraft or vessel, was observation continued until the initial sighting could be verified?

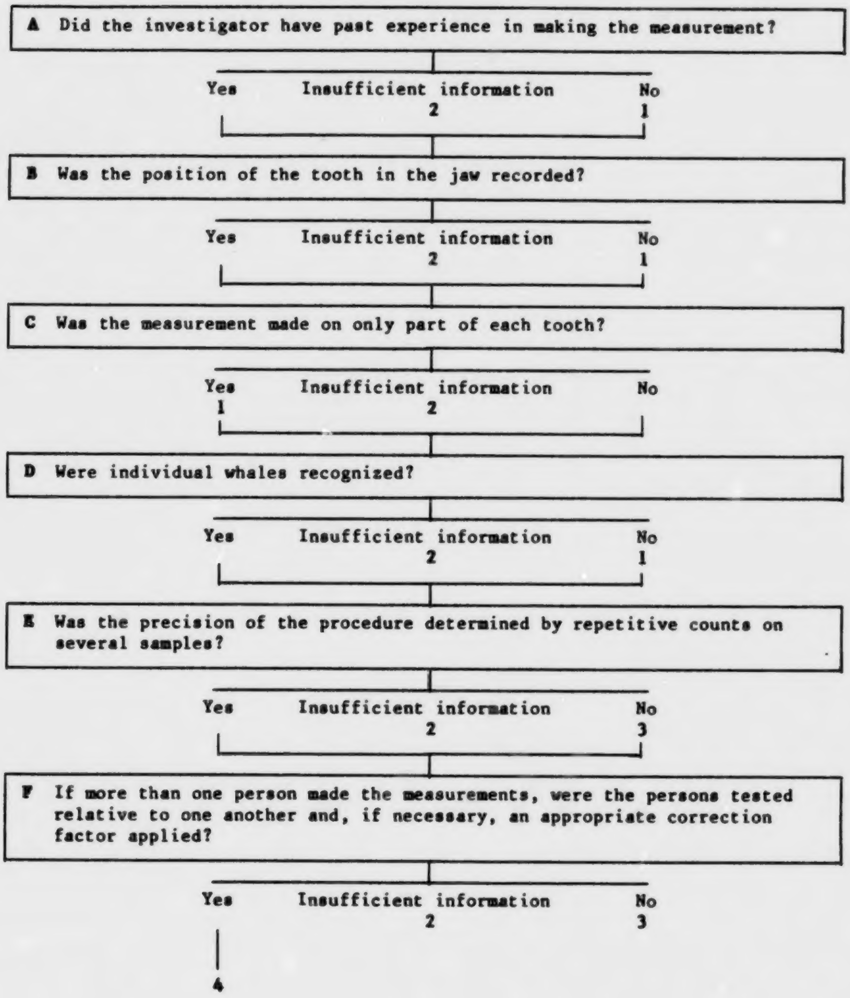
Yes 4
Insufficient information 2
No 3

RATING CHART F

MEASUREMENTS

# of dentine layers   racemization lens protein (omit B & C)

QUESTIONS



A Did the investigator have past experience in making the measurement?

Yes
Insufficient information
2
No
1

B Was the position of the tooth in the jaw recorded?

Yes
Insufficient information
2
No
1

C Was the measurement made on only part of each tooth?

Yes
1
Insufficient information
2
No

D Were individual whales recognized?

Yes
Insufficient information
2
No
1

E Was the precision of the procedure determined by repetitive counts on several samples?

Yes
Insufficient information
2
No
3

F If more than one person made the measurements, were the persons tested relative to one another and, if necessary, an appropriate correction factor applied?

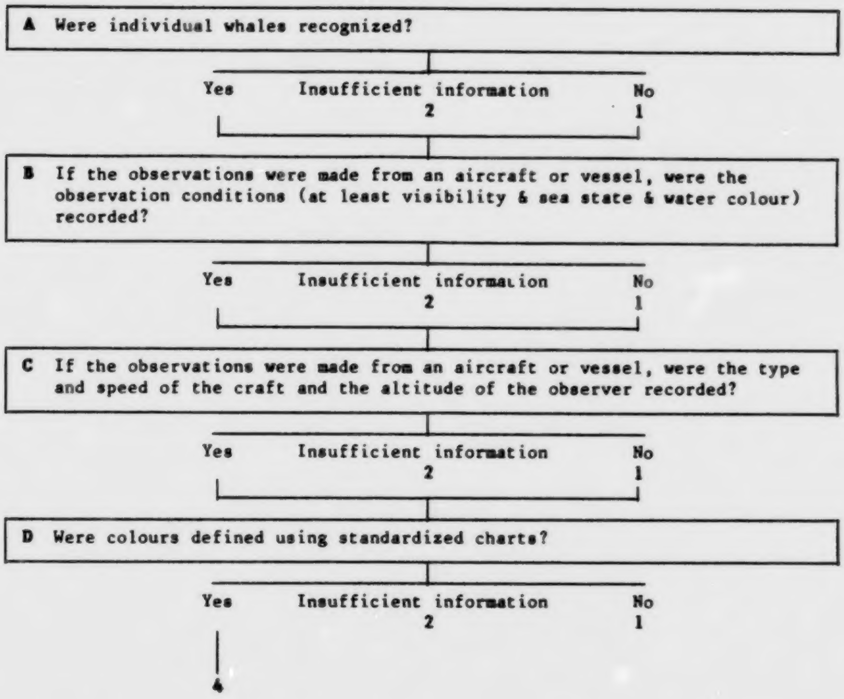
Yes
Insufficient information
2
No
3
4

RATING CHART G

MEASUREMENTS

overall colour
colour pattern
blubber colour (omit B & C)
bone colour (omit B & C)
scar pattern (omit D)
mud on skin (omit D)

QUESTIONS



A Were individual whales recognized?

Yes
Insufficient information
2
No
1

B If the observations were made from an aircraft or vessel, were the observation conditions (at least visibility & sea state & water colour) recorded?

Yes
Insufficient information
2
No
1

C If the observations were made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes
Insufficient information
2
No
1

D Were colours defined using standardized charts?

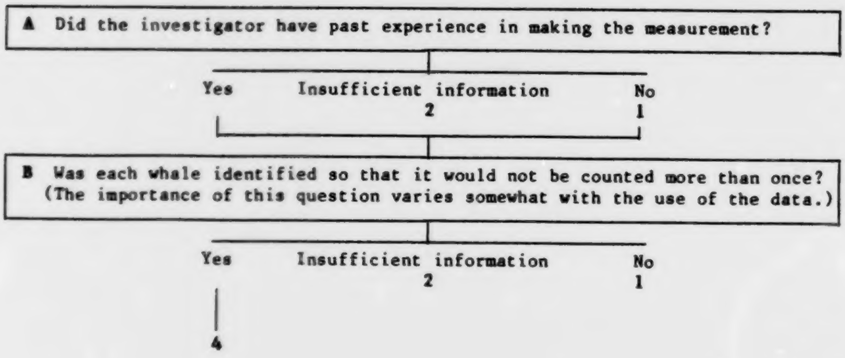
Yes
Insufficient information
2
No
1
4

RATING CHART H

MEASUREMENTS

genital structure
presence of tusk
placenta present
fetus present
milk present

QUESTIONS



A Did the investigator have past experience in making the measurement?

Yes
Insufficient information 2
No 1

B Was each whale identified so that it would not be counted more than once? (The importance of this question varies somewhat with the use of the data.)

Yes 4
Insufficient information 2
No 1

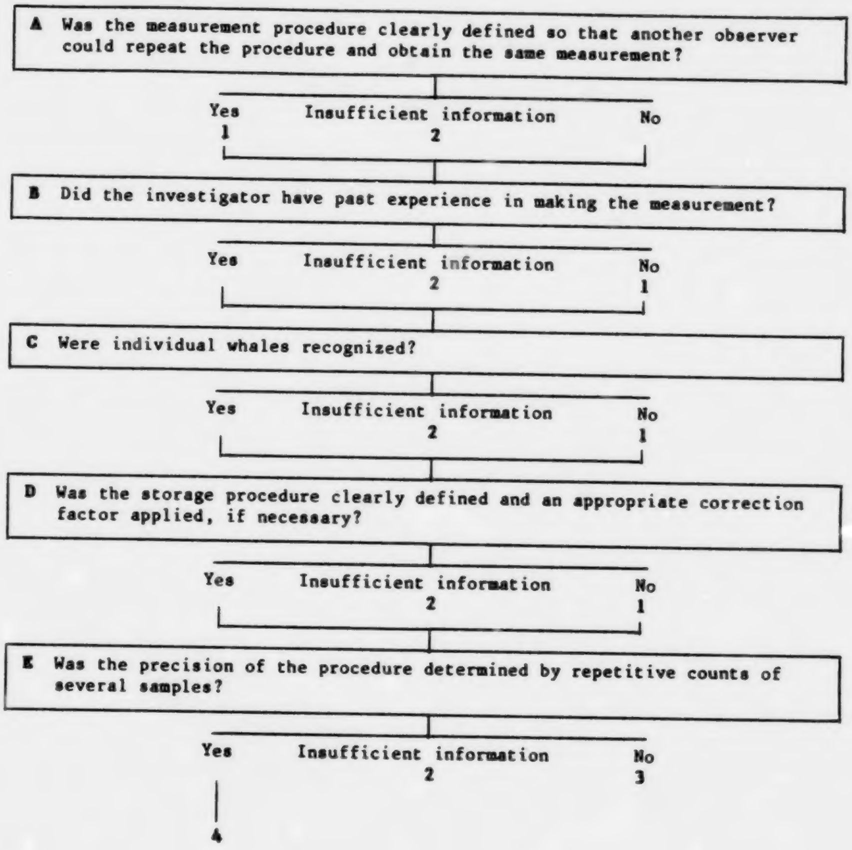
RATING CHART I

MEASUREMENTS

sperm present
spermatogenesis stages

corpora lutea #
corpora albicantia #

QUESTIONS

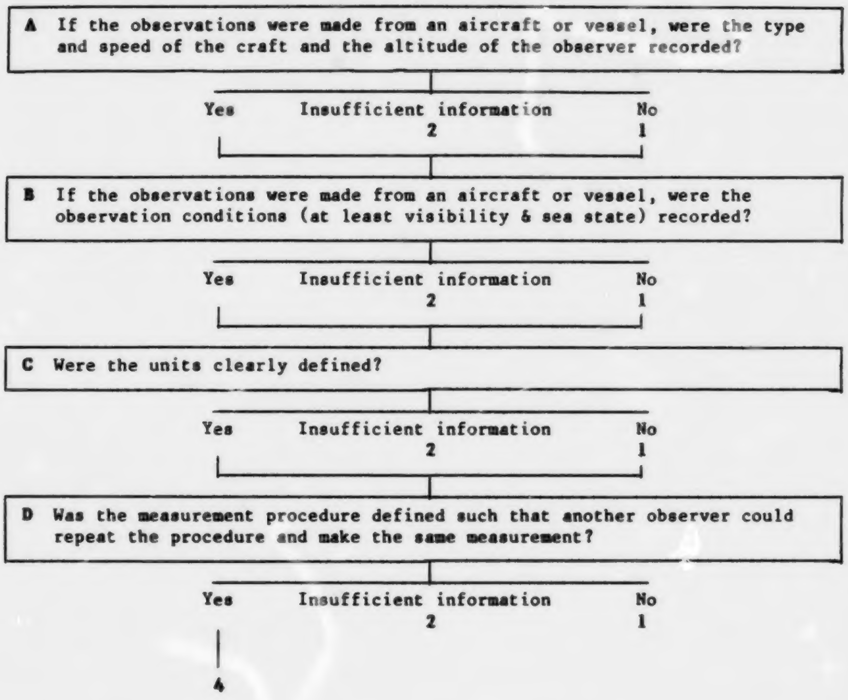

A Was the measurement procedure clearly defined so that another observer could repeat the procedure and obtain the same measurement?
Yes
1
Insufficient information
2
No
B Did the investigator have past experience in making the measurement?
Yes
Insufficient information
2
No
1
C Were individual whales recognized?
Yes
Insufficient information
2
No
1
D Was the storage procedure clearly defined and an appropriate correction factor applied, if necessary?
Yes
Insufficient information
2
No
1
E Was the precision of the procedure determined by repetitive counts of several samples?
Yes
Insufficient information
2
No
3
4

RATING CHART J

MEASUREMENTS

presence of birds	defecating
mud coming from mouth	feeding

QUESTIONS



A If the observations were made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes — Insufficient information 2 — No 1

B If the observations were made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes — Insufficient information 2 — No 1

C Were the units clearly defined?

Yes — Insufficient information 2 — No 1

D Was the measurement procedure defined such that another observer could repeat the procedure and make the same measurement?

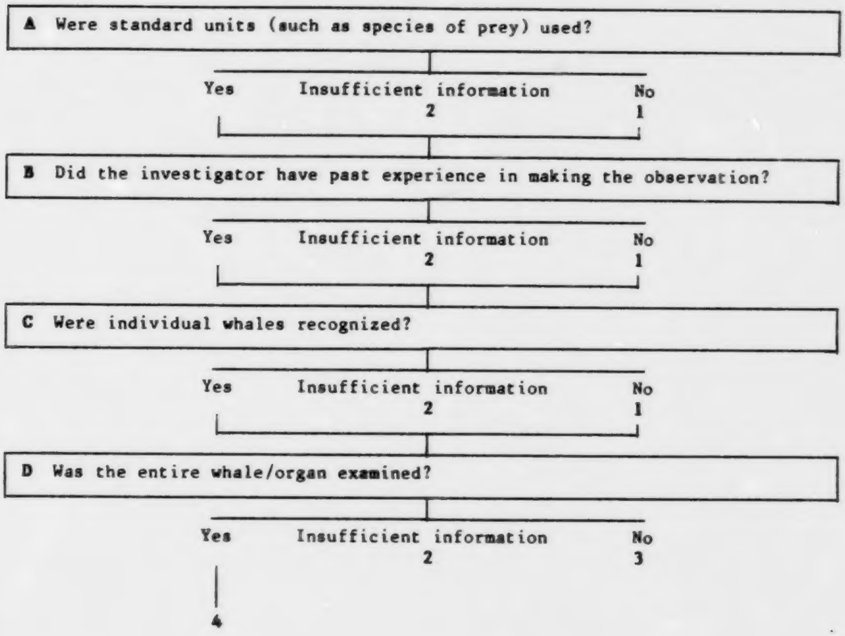
Yes 4 — Insufficient information 2 — No 1

RATING CHART K

MEASUREMENTS

stomach contents
parasites present (start at B)
metal present (start at B)

QUESTIONS



A Were standard units (such as species of prey) used?

Yes — Insufficient information 2 — No 1

B Did the investigator have past experience in making the observation?

Yes — Insufficient information 2 — No 1

C Were individual whales recognized?

Yes — Insufficient information 2 — No 1

D Was the entire whale/organ examined?

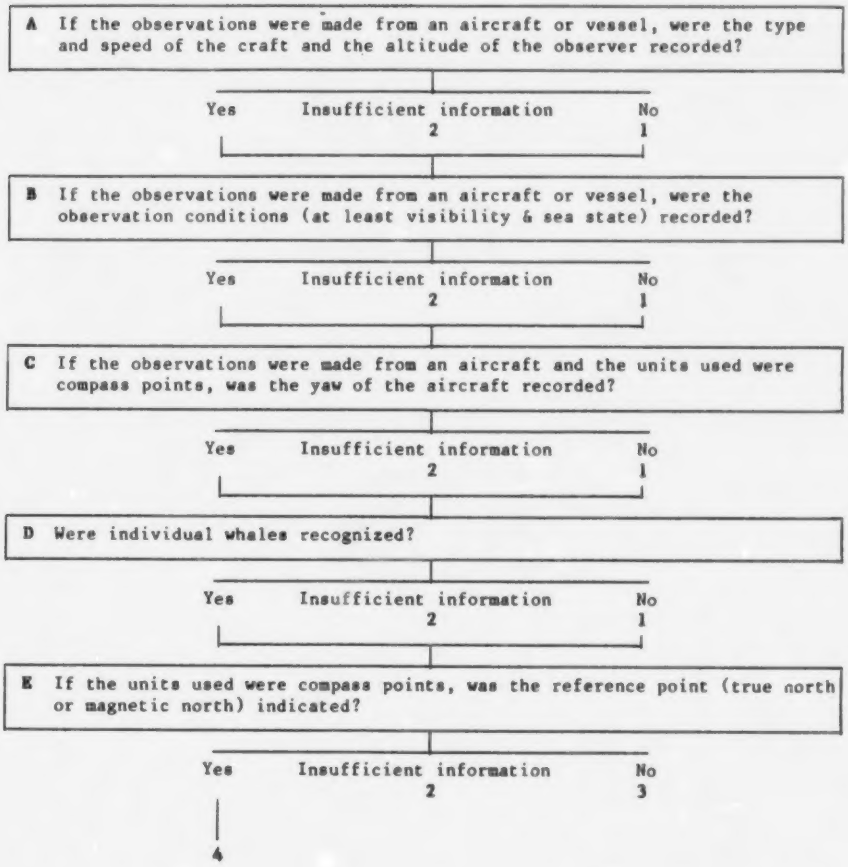
Yes 4 — Insufficient information 2 — No 3

RATING CHART L

MEASUREMENTS

heading (omit D) swimming under ice (omit C & E)

QUESTIONS



A If the observations were made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes
Insufficient information
2
No
1

B If the observations were made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes
Insufficient information
2
No
1

C If the observations were made from an aircraft and the units used were compass points, was the yaw of the aircraft recorded?

Yes
Insufficient information
2
No
1

D Were individual whales recognized?

Yes
Insufficient information
2
No
1

E If the units used were compass points, was the reference point (true north or magnetic north) indicated?

Yes
Insufficient information
2
No
3
4

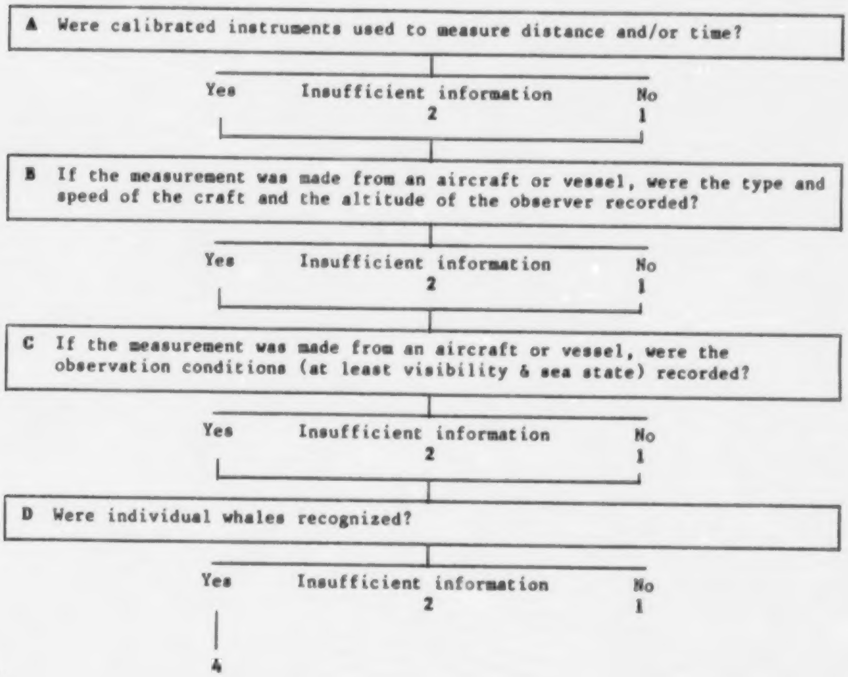
RATING CHART M

MEASUREMENTS

distance/time
distance/dive

distance between tail beats

QUESTIONS



A Were calibrated instruments used to measure distance and/or time?

Yes — Insufficient information 2 — No 1

B If the measurement was made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes — Insufficient information 2 — No 1

C If the measurement was made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes — Insufficient information 2 — No 1

D Were individual whales recognized?

Yes 4 — Insufficient information 2 — No 1

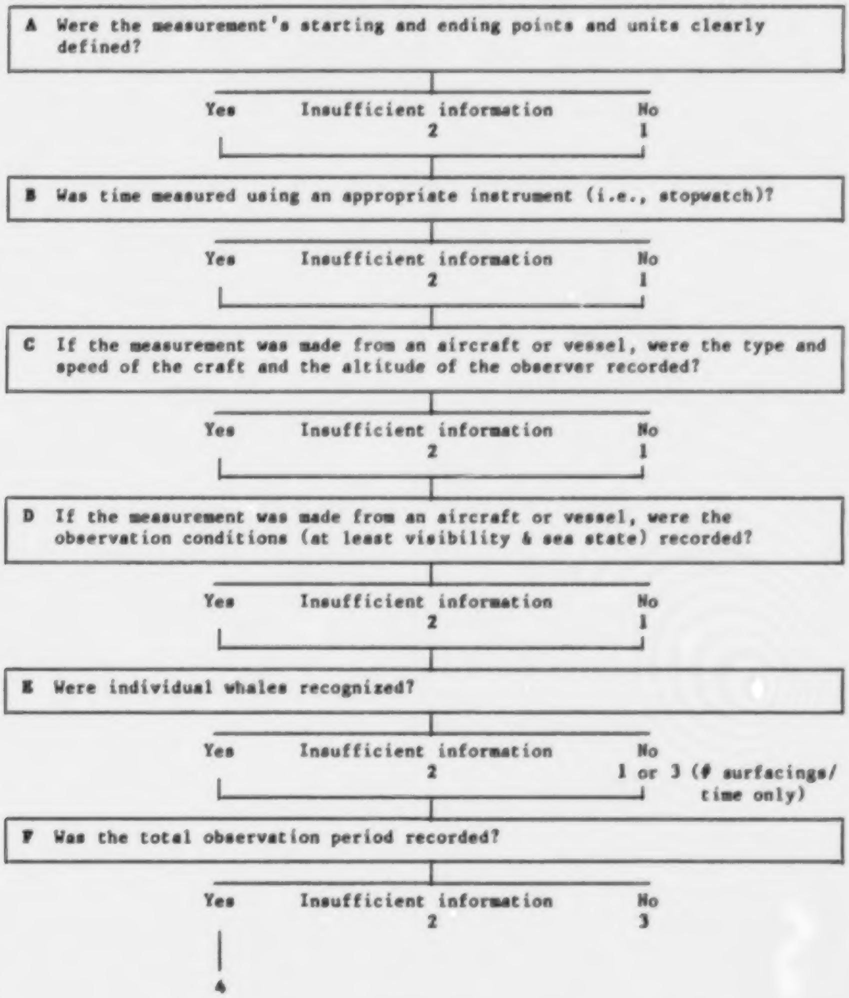
RATING CHART H

MEASUREMENTS

dive time
surface time
time between blows

blows/surfacing (omit B)
surfacings/time

QUESTIONS



A Were the measurement's starting and ending points and units clearly defined?

Yes — Insufficient information 2 — No 1

B Was time measured using an appropriate instrument (i.e., stopwatch)?

Yes — Insufficient information 2 — No 1

C If the measurement was made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes — Insufficient information 2 — No 1

D If the measurement was made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes — Insufficient information 2 — No 1

E Were individual whales recognized?

Yes — Insufficient information 2 — No 1 or 3 (# surfacings/time only)

F Was the total observation period recorded?

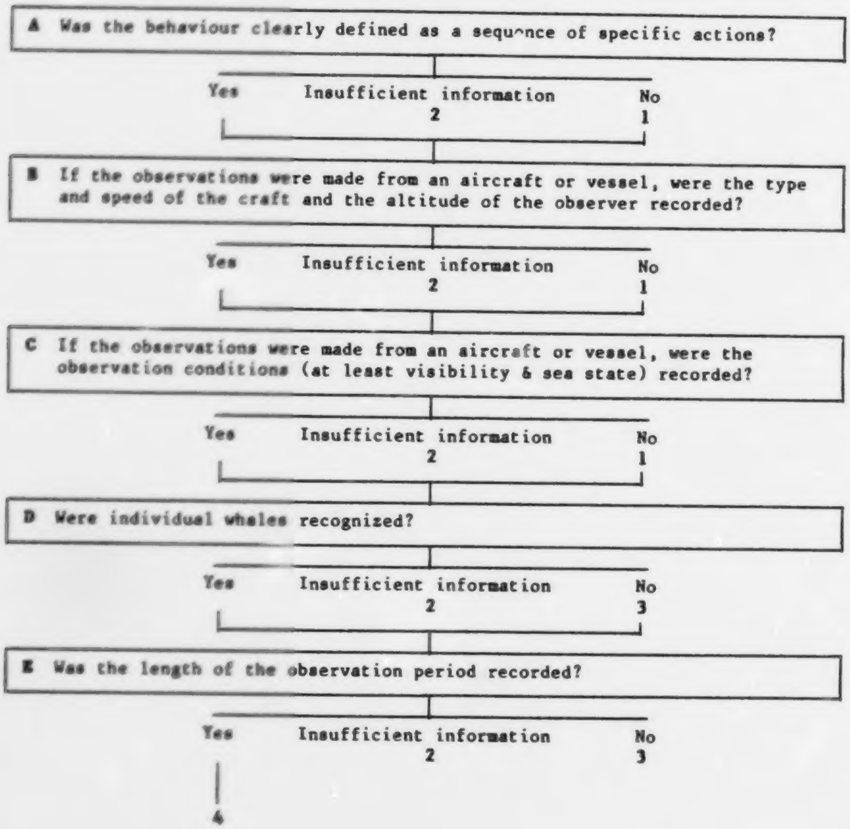
Yes 4 — Insufficient information 2 — No 3

RATING CHART O

MEASUREMENTS

# underwater blows
nudges
pushes
chases
slaps
disturbing mud
breaking ice with back
splashing
breaching
tail slapping
head slamming
flipper slapping
gamming
spy-hopping
porpoising
swimming in circles
mouth open
forward lunges
rolling on side
dive characteristics
turning at surface
log lifting
log pushing
log clasping
rolling log along body
mating
nursing

QUESTIONS



A Was the behaviour clearly defined as a sequ^nce of specific actions?

Yes — Insufficient information 2 — No 1

B If the observations were made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes — Insufficient information 2 — No 1

C If the observations were made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes — Insufficient information 2 — No 1

D Were individual whales recognized?

Yes — Insufficient information 2 — No 3

E Was the length of the observation period recorded?

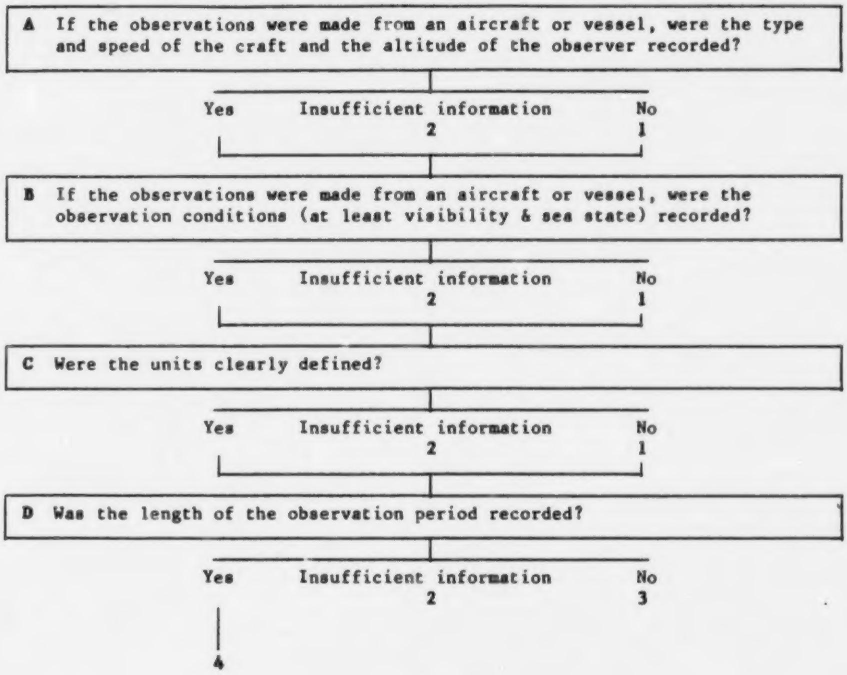
Yes 4 — Insufficient information 2 — No 3

RATING CHART P

MEASUREMENTS

orientation to others
orientation to vessel
orientation to aircraft
orientation to waves/wind/wind rows
orientation to ice edge

QUESTIONS



A If the observations were made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes — Insufficient information 2 — No 1

B If the observations were made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes — Insufficient information 2 — No 1

C Were the units clearly defined?

Yes — Insufficient information 2 — No 1

D Was the length of the observation period recorded?

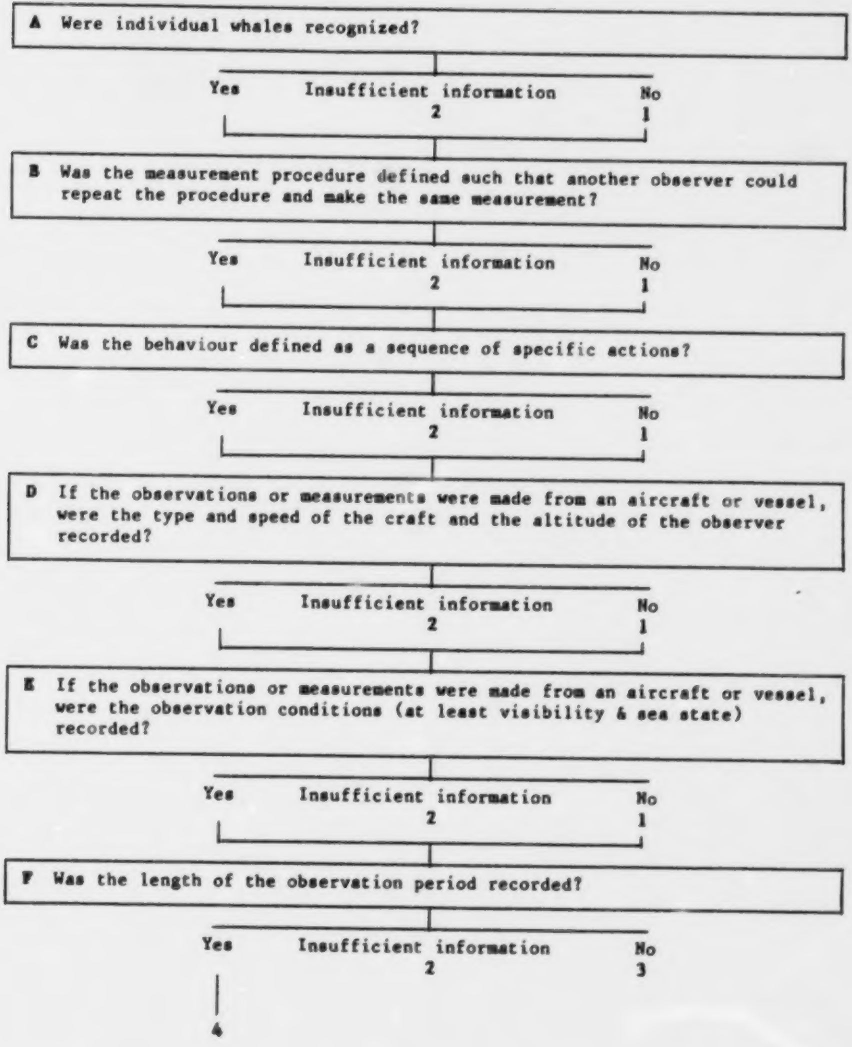
Yes 4 — Insufficient information 2 — No 3

RATING CHART Q

MEASUREMENTS

synchrony among animals (start at B)
distance between individuals (omit C)
position in water (start at B & omit C)

QUESTIONS



A Were individual whales recognized?

Yes — Insufficient information 2 — No 1

B Was the measurement procedure defined such that another observer could repeat the procedure and make the same measurement?

Yes — Insufficient information 2 — No 1

C Was the behaviour defined as a sequence of specific actions?

Yes — Insufficient information 2 — No 1

D If the observations or measurements were made from an aircraft or vessel, were the type and speed of the craft and the altitude of the observer recorded?

Yes — Insufficient information 2 — No 1

E If the observations or measurements were made from an aircraft or vessel, were the observation conditions (at least visibility & sea state) recorded?

Yes — Insufficient information 2 — No 1

F Was the length of the observation period recorded?

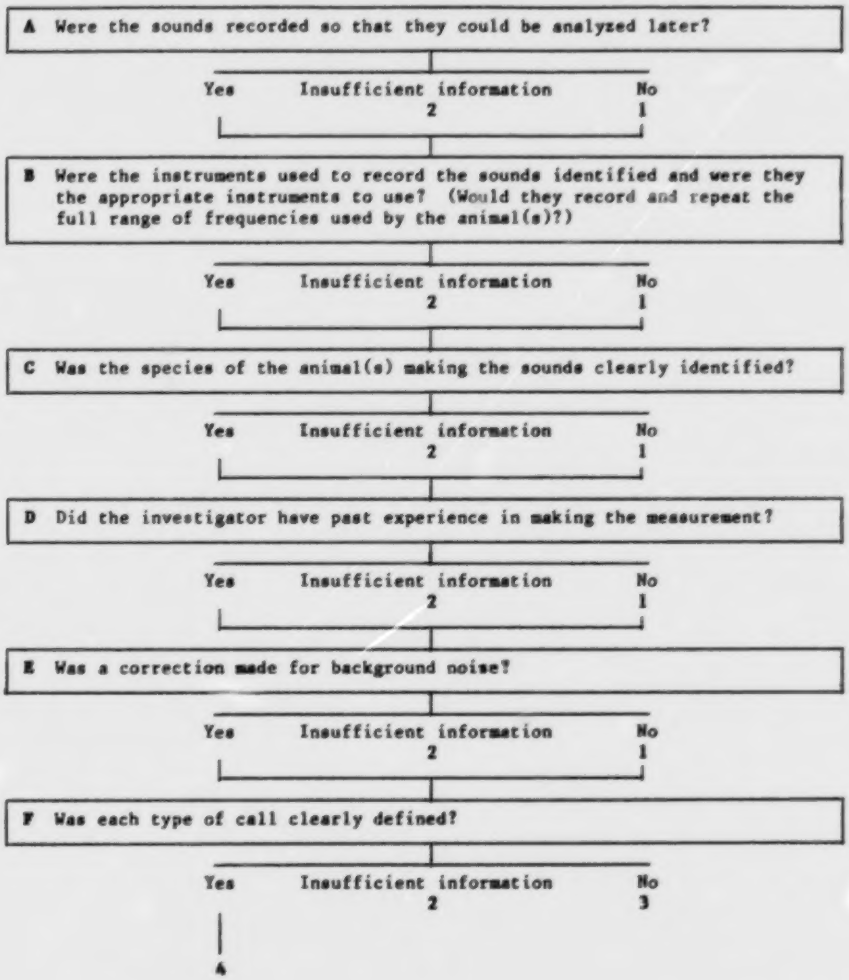
Yes 4 — Insufficient information 2 — No 3

RATING CHART R

MEASUREMENTS

# calls/whale-hour	call intensity
# calls/type/time	call frequency spectrum
call duration (omit D)	pulse rate

QUESTIONS



A Were the sounds recorded so that they could be analyzed later?

Yes — Insufficient information 2 — No 1

B Were the instruments used to record the sounds identified and were they the appropriate instruments to use? (Would they record and repeat the full range of frequencies used by the animal(s)?)

Yes — Insufficient information 2 — No 1

C Was the species of the animal(s) making the sounds clearly identified?

Yes — Insufficient information 2 — No 1

D Did the investigator have past experience in making the measurement?

Yes — Insufficient information 2 — No 1

E Was a correction made for background noise?

Yes — Insufficient information 2 — No 1

F Was each type of call clearly defined?

Yes 4 — Insufficient information 2 — No 3

6.4 CRITERIA FOR RATING METHODS USED FOR OBTAINING WHALE DATA

All measurements require the correct identification of the animal to species. Identification to species is not generally appraised for reasons outlined in section 6.1. Verification of the identification is possible only if the entire whale is collected or a clear photograph or videotape is obtained.

6.4.1 Units Used

Imprecise units strongly influence the precision and accuracy of the data. Vague estimates of whale numbers or distance or location are particularly subject to subjective interpretation and can change. For example, an aerial surveyor may consider 10 whales to be a "large" number if these are the first whales sighted after many days of surveying. Whale lengths are subject to interpretation unless all of the whale's body is seen and a small distance, less than two or three whale lengths, is being measured. Inclinometer degrees are precise units if the plane does not change its altitude and the observer does not move his or her head. Units such as hues vary with personal perception, unless a standard chart is used. Identification of stomach contents using common names is subject to misinterpretation. Compass points are exact units only if the reference point (true north or magnetic north) is indicated. "Group" is another unit that can have multiple interpretations, unless it is properly defined.

6.4.2 Measurements Defined

Ill-defined measurements affect the precision and accuracy of the data. Behaviour measurements are very susceptible to personal interpretation unless each term is defined as a precise series of actions. For example, "mating" and "play" behaviour may involve some of the same actions.

6.4.3 Platform Described

Measurements taken from aircraft and vessels require a detailed record of the type of craft used, its altitude and speed, and size of area searched for any appraisal of data reliability. The resolution of an image depends on the distance between the eye or camera and the object. So the maintained altitude affects the length of time it takes to "recognize" a whale. Altitude also affects the apparent size of the search area. (That is a set area, such as 400m x 200m, appears to increase in size as altitude decreases.) Speed of craft and size of search area affect the length of time a point is in view and so affect the possibility of seeing a whale (because whales are not always at the surface where they can be seen). Viewing is easier from some types of aircraft and vessels than from other types. The type of craft used, distance from the whale (altitude), and speed can affect the amount of noise produced and thus can affect whale behaviour.

6.4.4 Appropriate Equipment Used

The type of equipment used affects the precision and accuracy of several measurements, in particular, morphometric, colour, and call measurements. Weighing devices are subject to drift, and need to be calibrated using known standards. Instruments used to obtain micro-measurements may also require frequent calibration. Different films record colours differently, and some are better in poor light conditions. Acoustic equipment is usually designed to detect specific frequencies, so care must be taken to ensure that the desired sounds are within the detection range. Amplification is usually necessary to be able to distinguish whale sounds from the background noise.

6.4.5 Observation Conditions

Observation conditions (ie., visibility, glare, wind, wave height) should be recorded to obtain reliable measurements from aircraft or vessels. Usually minimum standards for such conditions are set at the start of a program, and no measurements are attempted if the minimum conditions are not met. However, even within the range of acceptable conditions, the "sightability" of whales varies. Observation conditions may also affect the proportion of time that whales spend at the surface. This affects many of the measurements made from aircraft and vessels. At the present time, it is difficult to determine the appropriate correction factor to apply for different observation conditions, but appropriate data are slowly being obtained by researchers in the field.

6.4.6 Observer Experience

Observer experience is a very important factor affecting the quality of data obtained. Training ensures that the species are properly identified, measurement procedures are standardized and each step is followed, measurements are accurate, and individual animals are recognized. A recent International Whaling Commission Workshop on aerial and vessel survey methods stressed that unless observers are trained, the results may be useless. Observing hunting events and deciding whether or not a shot has mortally wounded a whale is one particular measurement that definitely requires an experienced observer.

6.4.7 Calibration of Observers

Even if observers are experienced, there will be differences in observers' abilities. This poses problems when measurements made by different observers are compared, unless the observers have been tested. The ideal test would be to compare an observer's results to a known standard; however, such a standard does not exist for most whale measurements. The practical solution to this is to test observers relative to one another. Calibration of observers is particularly important for measurements requiring a high level of skill, such as counting whales from an aircraft or vessel. For other measurements, such as those involving use of a tape measure, observer variability is unlikely to introduce bias into the results.

6.4.8 Length of Observation Period

Some measurements are not easily determined by a single overflight, but require a longer observation period. The use of most behavioural observations is greatly enhanced if they can be put into context. One flipper slap could be interpreted in many ways, but a sequence of several flipper slaps, followed by a push and then a chase is obviously an aggressive encounter. A prolonged observation period is also required when observing hunting events. The precision and accuracy of data on the number of whales in a group increases if the aircraft circles the area, doing several counts, so that whales beneath the surface can be detected as they surface. Unusual sightings, such as seeing an animal with two tusks, should be verified to ensure that they are not optical illusions.

6.4.9 Recognition of Individuals

The possibility of counting an animal more than once is important if the total number of animals seen is small and the chance of double-counting an animal is great. Most researchers plan the timing and progression of survey transects such that double-counting animals is unlikely. Recognizing individual whales is particularly important in determining dive times; researchers report that whales within a group will take turns surfacing. Thus, unless individual whales are recognized, the measured dive times will be shorter than the actual values. Landed whales may be double-counted unless the hunting group, and date and location of hunting event are recorded.

6.4.10 Extrapolation from Partial Counts

Extrapolation from partial counts is subsampling and, unless the procedure has been tested, may introduce bias into the results. Whale distribution is usually clumped, so subsampling is not recommended. Comparing partial to total counts of the number of whales on photographs would assess the amount of bias introduced by subsampling, but this has not been done yet. For some types of measurements, such as length and girth measurements, partial counts are very likely to be inaccurate.

6.4.11 Yaw of Aircraft

Yaw of an aircraft, or the deviation from the intended heading, must be recorded to obtain accurate data on the direction of travel of whales. Observers usually record the whale's heading relative to the aircraft's heading, assuming the aircraft is moving in the direction the nose is pointing. This assumption is correct only with calm conditions.

6.4.12 Body Position

Body position can affect length measurements, particularly total length. Girth measurements can also be misleading if the whale is in a flexed position. Tooth location in the jaw affects the amount of tooth wear and can affect the number of dentine layers.

6.4.13 Repetitive Counts

Repetitive counts of the same samples provide the data needed to calculate precision. For several whale measurements, only a relative appraisal of precision is possible; however, measurements obtained in the laboratory, such as number of dentine layers, number of whales per photograph, number of corpora lutea, and epididymal tubule diameter, can be counted and re-counted.

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8. DATA INVENTORY TABLES

8.1 DATA INVENTORY TABLE 1: SUMMARY LISTING OF DATA SETS

Data Inventory Table 1 presents a summary listing of all of the data sets included in this inventory. The information on each data set contained in each column and the abbreviations used are described below by column.

DATA SET I.D.

Each identification (I.D.) number is unique to a data set; all subsequent references to data sets are by I.D. numbers. The first two digits of the I.D. refer to the last two digits of the year that data collection commenced; the last four digits of the I.D. are assigned to the data set. The subscript$_{18}$ indicates data sets obtained in the 1800s.

COLLECTING AGENCY

The collecting agency is the vessel, government organization or private company which conducted the study. If the funding agency is different from the collecting agency, the funding agency is given in parentheses. Agency names are given as reported, but agencies whose names are known to have changed are denoted with an asterisk (*). These include:

Bureau of Land Management, now called Minerals Management Service;

Dep. of Naval Service, now called Dep. of National Defense;

Dep. of Northern Affairs & National Resources, now called Dep. of Indian Affairs and Northern Development;

Dep. of Mines & Resources, now called Parks Canada Program, Environment Canada; and,

Imperial Oil Ltd., now called Esso Resources Canada Ltd.

COLLECTING PERIOD

The collecting period is the time actually spent within the geographic limits of the area (see Figure 2.1). Whenever possible, precise dates are given. If the period started or stopped on one of two days, both dates are indicated (e.g., Aug. 18-19). A question mark in parentheses appears after uncertain dates. If a study extended beyond the calendar year, the dates include a year.

AREA

Specific areas within the Beaufort Sea and Amundsen Gulf region are outlined in Figure 2.1. For the historical bowhead harvests, the searched area was assumed to have included the Beaufort Coast, Mackenzie Shelf, Continental Slope, and Amundsen Gulf. For the recent white whale harvests, the searched area was assumed to have included the Mackenzie Bay, Kugmallit Bay, and East Mackenzie Bay, unless known to have been otherwise.

TAXA REPORTED

Only whale and porpoise species for which measurements were inventoried are listed. A blank implies that it is not known if any information on any species was obtained. If no whale measurements were obtained, "none" is indicated. The abbreviations used are:

BW = bowhead whale (Balaena mysticetus);

GW = gray whale (Eschrichtius robustus);

HP = harbour porpoise (Phocoena phocoena);

KW = killer whale (Orcinus orca);

N = narwhal (Monodon monoceros); and,

WW = white whale (Delphinapterus leucas).

WHALE MEASUREMENTS OR OBSERVATIONS

This column contains all of the specific types of whale measurements or observations made, organized by category. If there was any doubt on whether or not a specific type of measurement was made within the area's geographic boundaries (e.g., the data were examined only in report form), this measurement is listed in Data Inventory Table 1. (In Data Inventory Table 2, such doubt is indicated by "Note 9" in the "Rating" column for that specific measurement.) If this column is blank, then it is not known if any whale information was obtained. If "none" is indicated, then no whale measurements were obtained even though the survey design and execution made whale sightings likely.

CONCURRENT MEASUREMENTS

Measurements other than those of whales obtained during the study are listed according to discipline: Biology, Chemistry, and Physics. Concurrent biological measurements are organized by taxonomic group, and detailed only to category (the same categories as those used to report whale measurements and observations). Concurrent physical and chemical measurements are organized by sampling substrate. "Incomplete" implies that concurrent information was collected, but no details are available.

REMARKS

The purpose of the study, especially those other than whale research, is indicated in this column. Consecutive series of data sets are also noted.

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
48-0001	(British Admiralty)	Aug. 03-22	Beaufort Coast, Amundsen Gulf	BW WW	Number # seen/location # landed # dead/location Identification Age overall colour	Fish Identification Birds Number Identification Reproduction Movements Behaviour Ice-associated Mammals Number Identification Behaviour Terrestrial Mammals Number Identification Food Behaviour Pinnipeds Number Identification Behaviour		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Depth Water level	searching for Franklin expedition
50-0001	Investigator	Aug. 18-19, 1850 - Sep. 10, 1851	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf, Prince of Wales Strait	BW WW	Number # seen/location # landed Identification Movements heading	Fish Number Morphometrics Birds Number Identification Movements Ice-associated Mammals Number Identification Morphometrics Terrestrial Mammals Number Identification Age Reproduction Pinnipeds Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Salinity Currents Depth Water level	searching for Franklin expedition
88-0001	J. Hadley	1888 - 1893	Beaufort Coast	BW	Number # seen/location # landed Identification Morphometrics baleen weight				

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
88-0002	Old Dartmouth Historical Society	1888 - 1914	Beaufort Coast, Mackenzie Shelf, Banks Is. Shelf	BW	Number # seen/location # landed Identification Morphometrics tail width baleen weight total weight Movements distance/dive Behaviour # blows/surfacing	Terrestrial Mammals Number Identification		Ice Coverage Atmosphere Wind speed Precipitation Atmospheric conditions Water Column Temperature	whaling records; contains information from data sets 89-0003 and 90-0001
89-0001	New York Zoological Society	1889 - 1911	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # landed # struck, killed and lost Identification				whaling records; contains information from other data sets, such as 89-0003 and 90-0001
89-0002	New Bedford Whaling Museum & University of California at Santa Barbara (for Old Dartmouth Historical Society, U.S. Marine Mammal Commission, National Marine Fisheries Service, National Geographic Society & American Philosophical Society)	1889 - 1914	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # of calves # /group # landed # struck and lost alive # struck, killed and lost # dead/location Identification Morphometrics baleen weight oil volume Reproduction genital structure			Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions	whaling records; contains information from other data sets, such as 89-0003 and 90-0001
89-0003	*Grampus*	Aug.	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification Age colour pattern baleen colour			Water Column Depth	whaling
90-0001	*Mary D. Hume*	Aug. 20, 1890 - Aug. 26-27, 1892	Beaufort Coast, Mackenzie Shelf, Continental Slope,	BW WW	Number # seen/location # landed Identification	Anadromous Fish Number Birds Number		Ice Coverage Thickness Atmosphere	whaling

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
90-0001	Continued		Amundsen Gulf		Morphometrics baleen weight	Identification Food Ice-associated Mammals Number Identification Reproduction Food Terrestrial Mammals Number Identification Pinnipeds Number Identification		Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Salinity Depth	
91-0001	LGL Ltd. & New Bedford Whaling Museum (for U.S. Marine Mammal Commission & National Marine Fisheries Service, U.S. Dep. of Commerce)	1891 - 1906	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification			Atmosphere Precipitation Atmospheric conditions Water Column Depth	whaling records; contains information from data sets 90-0001, 93-0002 and 97-0001
93-0001	Belvedere	Aug. 20 - Sep. 11	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification Morphometrics gum length blubber thickness # baleen plates baleen weight tenderloin weight oil volume Food	Ice-associated Mammals Identification Food Behaviour		Water Column Depth	whaling
93-0002	Newport	Aug. 22, 1893 - Sep. 03, 1896	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed # struck and lost Identification Morphometrics total length flipper length flipper width tail width blubber thickness baleen length	Fish Number Birds Number Identification Ice-associated Mammals Number Identification Terrestrial Mammals Number		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions	whaling

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
93-0002	Continued				# baleen plates baleen weight blubber weight oil volume Age overall colour Food Movements heading distance/time Behaviour dive time surface time # blows/surfacing position in water	Identification Pinnipeds Identification			
94-0001	Museum of the State University of Iowa	June 29 - Aug. 30-31	Beaufort Coast	BW	Number # landed # dead/location Identification	Fish Number Identification Birds Number Identification Ice-associated Mammals Number Identification Terrestrial Mammals Number Identification Behaviour Pinnipeds Number Identification		Ice Coverage Thickness Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Depth Water level	
94-0002	Navarch	Aug. 19, 1894 - Aug. 27, 1896	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # of calves # landed # struck and lost # dead/location Identification Morphometrics baleen weight oil volume Movements heading	Fish Number Morphometrics Birds Number Identification Movements Ice-associated Mammals Number Identification Behaviour Terrestrial Mammals Number Identification Morphometrics		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Salinity Currents Depth	whaling

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
94-0002	Continued					Pinnipeds Number Identification			
95-0001	Belvedere	July 1895 - Aug. 1896	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification Morphometrics total length head length lip length baleen length # baleen plates baleen weight lip weight tongue and lower jaw weight oil volume Food Behaviour dive time surface time mouth open			Ice Coverage Atmosphere Wind direction Water Column Currents Depth	whaling
97-0001	Beluga	Aug. 15, 1897 - Sep. 1899	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # of calves # landed # struck and lost # dead/location Identification Morphometrics baleen length	Marine Fish Number Identification Morphometrics Birds Number Identification Morphometrics Ice-associated Mammals Number Identification Age Terrestrial Mammals Number Identification Pinnipeds Number Identification Age Behaviour		Ice Coverage Atmosphere Precipitation Atmospheric conditions Water Column Depth	whaling
99-0001	Bowhead	Aug. 14-27 (?)	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification Morphometrics			Ice Coverage Atmosphere Wind speed Wind direction	whaling

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
99-0001	Continued				baleen weight			Precipitation Atmospheric conditions Water Column Depth	
00-0001	Bowhead	Aug. 05, 1900 - Aug. 14, 1901	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification Morphometrics baleen weight	Fish Number Birds Number Identification Movements Ice-associated Mammals Number Identification Terrestrial Mammals Number Identification Morphometrics Pinnipeds Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Depth	whaling
00-0002	Beluga	Aug. (?) 1900 - Sep. 03, 1901	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed Identification Reproduction genital structure	Birds Number Identification Reproduction Ice-associated Mammals Number Identification Food Terrestrial Mammals Number Identification Behaviour		Ice Coverage Thickness Atmosphere Wind speed Wind direction Water Column Temperature Current direction	whaling
02-0001	Beluga	Aug. 05 (?) - Oct. 14 (?)	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # landed # struck and lost Identification	Birds Number Ice-associated Mammals Number Identification		Atmosphere Precipitation Atmospheric conditions	whaling
03-0002	Bowhead	Aug. 16, 1903 - Aug. 18, 1906	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # seen/location # /group # landed # struck and lost	Fish Number Morphometrics Birds Number		Ice Coverage Atmosphere Wind speed Wind direction	whaling

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
03-0002	Continued				Identification Morphometrics baleen weight oil volume Movements heading	Identification Movements Ice-associated Mammals Number Identification Terrestrial Mammals Number Identification Morphometrics Pinnipeds Number Identification		Precipitation Atmospheric conditions Water Column Depth	
03-0003	Beluga	July - Sep. 06 (?)	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	BW	Number # landed Identification	Ice-associated Mammals Number Identification		Ice Coverage Atmosphere Precipitation Atmospheric conditions	whaling
05-0004	William Baylies	Aug. 04 (?) - 17 (?)	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf	none	none	Ice-associated Mammals Number Identification		Ice Coverage Type	whaling
08-0003	American Museum of Natural History	July 23, 1908 - Sep. (?) 1912	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf	BW WW	Number # seen/location # landed # dead/location Identification Morphometrics total length flipper length tail width baleen length baleen weight oil volume Age mud on skin Movements heading Behaviour dive time # blows/time position in water breaching dive characteristics	Fish Number Identification Morphometrics Age Reproduction Birds Number Identification Morphometrics Age Reproduction Food Movements Behaviour Ice-associated Mammals Number Identification Age Reproduction Food Behaviour Terrestrial		Ice Coverage Atmosphere Wind direction	natural history expedition

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
08-0003	Continued					Mammals Number Identification Morphometrics Age Reproduction Food Parasites Movements Behaviour Pinnipeds Number Identification Morphometrics Behaviour			
10-0003	Herman	Aug. (?)	Beaufort Coast	BW	Number # landed Identification			Ice Coverage Atmosphere Precipitation Atmospheric conditions	trading
13-0001	Canadian Arctic Expedition of 1913-1918 (for Dep. of Naval Service*)	Dec. (?) 1913 - April 1915; Dec. 1915 - Mar. 1916	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf, Prince of Wales Strait	BW WW	Number # seen/location # /group # dead/location Identification Movements heading Behaviour breaking ice with back	Zooplankton Number Identification Birds Number Identification Food Behaviour Ice-associated Mammals Number Identification Morphometrics Age Reproduction Food Movements Behaviour Terrestrial Mammals Number Identification Morphometrics Food Movements Behaviour Pinnipeds Number Identification		Ice Coverage Type Thickness Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Salinity Currents Depth	natural history expedition

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
13-0001	Continued					Food Behaviour			
42-0002	Lands, Parks & Forests Branch, Dep. of Mines and Resources*	July 10 - Oct. 20	Beaufort Coast	BW WW	Number # seen/location # landed Identification	Birds Number Identification Ice-associated Mammals Number Identification Terrestrial Mammals Number Identification Food Movements Pinnipeds Number Identification			
51-0002	Cancolim II	Aug. 20 - Sep. 15	Mackenzie Shelf, Amundsen Gulf, Banks Is. Shelf	BW WW	Number # seen/location # /group # landed # dead/location Identification	Phytoplankton Number Zooplankton Number Terrestrial Mammals Number Identification Morphometrics Age Reproduction Pinnipeds Number Identification Behaviour		Ice Coverage Water Column Temperature Salinity	
52-0008	National Museum of Canada (for Defense Research Board, Dep. of Northern Affairs & National Resources* & Arctic Institute of North America)	May 10 - Aug.11 Sep 22 - ?	Amundsen Gulf, Banks Is. Shelf	none	none	Ice-associated Mammals Number Identification Morphometrics Age Reproduction Movements Behaviour Terrestrial Mammals Number Identification Morphometrics Age Reproduction		Ice Coverage Atmosphere Wind speed	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
52-0008	Continued					Movements Behaviour Pinnipeds Number Identification			
53-0013	University of Alberta	July 29 - Aug. 16	Beaufort Coast, Amundsen Gulf	BW WW	Number # seen/location # of calves Identification Age overall colour Movements heading	Birds Number identification Reproduction Food Movements Behaviour Ice-associated Mammals Number Identification Reproduction Behaviour Terrestrial Mammals Number Identification Morphometrics Age Reproduction Pinnipeds Number Identification		Ice Coverage	
54-0003	Northwind	Aug. 09-14, Sep. 07-10	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf, Prince of Wales Strait	BW WW	Number # seen/location Identification	Zoobenthos Number Identification Marine Fish Number Pinnipeds Number Identification	Water Column Nutrients Dissolved oxygen	Water Column Temperature Salinity Depth	
54-0011	Arctic Biological Station	July - Aug.	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Banks Is. Shelf	WW	Number # seen/location # of calves # /group # landed Identification Morphometrics total length flipper length flipper width flipper shape Age overall colour			Ice Coverage	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
54-0011	Continued				Reproduction genital structure Food stomach contents Movements Behaviour call				
55-0010	Canadian Wildlife Service (for Northern Administration Branch)	Mar. 16 - July 24	Amundsen Gulf, Banks Is. Shelf	BW WW	Number # seen/location # /group Identification	Birds Number Identification Age Reproduction Movements Ice-associated Mammals Number Identification Morphometrics Age Reproduction Food Parasites Movements Behaviour Terrestrial Mammals Number Identification Morphometrics Age Reproduction Food Parasites Movements Behaviour Pinnipeds Number Identification Age Movements Behaviour		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions	
55-0011	Arctic Biological Station	July - Sep.	Kugmallit Bay	WW	Number # seen/location Identification Morphometrics total length blubber thickness Age # of dentine layers overall colour				

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
55-0011	Continued				Reproduction genital structure Food stomach contents Parasites				
56-0007	Arctic Biological Station	July - Sep.	Kugmallit Bay	WW	Identification Morphometrics total length blubber thickness Age # of dentine layers Reproduction genital structure Food stomach contents Parasites				see 55-0011
59-0009	Dep. of Northern Affairs & National Resources*	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	BW WW	Number # seen/location # of calves # landed Identification Morphometrics total length bone weight meat weight oil weight total weight Movements heading	Terrestrial Mammals Number Identification	Incomplete		
59-0010	Arctic Biological Station	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification				see 54-0011
60-0010	Arctic Biological Station	July	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification Morphometrics total length blubber thickness Age # of dentine layers Reproduction genital structure Food stomach contents Parasites				see 55-0011

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
61-0014	Arctic Biological Station	July	Beaufort Coast, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # seen/location # landed # struck and lost Identification Morphometrics total length blubber thickness Age # of dentine layers Reproduction genital structure milk present Food stomach contents Parasites				see 55-0011
61-0015	Dep. of Northern Affairs & National Resources*	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # of calves # landed Identification Reproduction genital structure	Incomplete			see 59-0009
62-0014	Dep. of Northern Affairs & National Resources*	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification	Incomplete			see 59-0009
63-0009	Dep. of Northern Affairs & National Resources*	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed # lost Identification	Incomplete			see 59-0009
64-0009	Dep. of Northern Affairs & National Resources*	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification	Incomplete			see 59-0009
65-0009	Dep. of Northern Affairs & National Resources*	July - Aug.	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification	Incomplete			see 59-0009
66-0011	Inuvik Research Laboratory, Dep. of Indian Affairs & Northern Development	Aug. 20, 1966 - Jan. 26, 1967	Eskimo Lakes	WW	Number # seen/location # of calves # landed # dead/location Identification Morphometrics total length		Water Column pH	Ice Coverage Thickness Atmosphere Wind speed Precipitation Atmospheric conditions	whales trapped by ice

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
66-0011	Continued				body deformity Age overall colour Food Parasites Behaviour dive time # blows/surfacing # surfacings/time synchrony among individuals breaking ice with back # calls/whale - hour			Water Column Temperature Salinity Specific gravity Depth	
66-0012	Dep. of Indian Affairs & Northern Development	July - Aug.	Amundsen Gulf Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification Movements heading	Anadromous Fish Number Identification Terrestrial Mammals Number Identification	Incomplete		see 59-0009
67-0006	Game Management Service, Government of the Northwest Territories	July 09 - Aug. 05	Kugmallit Bay	WW	Number # landed Identification Morphometrics blubber thickness meat weight muktuk volume oil volume	Anadromous Fish Number Identification		Ice Coverage	
67-0007	University of Alberta		Beaufort Coast, Liverpool Bay, Eskimo Lakes	BW KW WW	Number # seen/location # dead/location Identification	Birds Number Identification Ice-associated Mammals Number Identification Age Terrestrial Mammals Number Identification Food Movements Pinnipeds Number Identification	Incomplete		bird study
68-0009	Arctic Biological Station	July 22 - Aug. 01 (?)	Kugmallit Bay	WW	Number # of calves # landed # dead/location			Water Column Depth	see 55-0011

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
68-0009	Continued				Identification tag # Morphometrics total length flipper length flipper width maximum girth tail width snout-to-blowhole length snout-to-anus length snout-to-genital slit length snout-to-umbilicus length snout-to-flipper length snout-to-eye length snout-to-ear length Age overall colour Reproduction genital structure Movements heading				
68-0010	Game Management Service, Government of the Northwest Territories	July - Aug.	Kugmallit Bay	WW	Number # landed Identification Morphometrics meat weight muktuk volume oil volume	Anadromous Fish Number Identification			
69-0017	Arctic Biological Station	July 01 - 18	Beaufort Coast, Mackenzie Bay, East Mackenzie Bay	WW	Number # seen/location # landed Identification tag # Morphometrics total length Age scar pattern Movements heading	Birds Number Identification Reproduction Ice-associated Mammals Number Identification Pinnipeds Number Identification		Ice Coverage Type Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Wave climate	
70-0016	Fisheries & Marine Service, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay	WW	Number # landed # struck and lost Identification				
71-0017	Fisheries & Marine Service, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie	WW	Number # landed Identification				see 70-0016

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
71-0017	Continued		Bay						
72-0005	Bedford Institute of Oceanography	July	Mackenzie Bay	WW	Number # seen/location Identification Food stomach contents			Water Column Temperature	Results of analyses of tissue samples in Chemistry inventory
72-0007	F.F. Slaney & Co. Ltd. (for Imperial Oil Ltd.*)	May 27 - Sep. 10	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # seen/location # of calves # /group # landed # struck and lost # struck, killed and lost # dead/location Identification Morphometrics total length total weight Reproduction genital structure fetus present milk present Food stomach contents presence of birds Movements heading Behaviour orientation to waves/wind	Phytoplankton Number Identification Zooplankton Number Identification Age Zoobenthos Number Identification Anadromous Fish Number Identification Morphometrics Age Reproduction Food Marine Fish Number Identification Morphometrics Age Reproduction Food Birds Number Identification Reproduction Food Movements Behaviour	Water Column Dissolved oxygen Other	Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Conductivity Current speed Current direction Depth Turbidity Transparency Water level Water climate	
72-0015	Fisheries & Marine Service, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification				see 70-0016
72-0016	Arctic Biological Station	June 29 - July 25, Sep. 19 - 21	Beaufort Coast, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay,	BW WW	Number # seen/location # /group # landed # struck and lost	Anadromous Fish Number Identification Morphometrics Birds		Ice Coverage Type Atmosphere Wind speed	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
72-0016	Continued		East Mackenzie Bay, Prince of Wales Strait		Identification tag # Morphometrics total length maximum girth Reproduction genital structure Food presence of birds Movements heading	Number Identification Reproduction Food Ice-associated Mammals Number Identification Movements Behaviour Terrestrial Mammals Number Identification		Wind direction Precipitation Atmospheric conditions Water Column Wave climate	
72-0048	LGL Ltd. (for Alaskan Arctic Gas Study Co. & Canadian Arctic Gas Study Ltd.)	July 10 - Sep. 17	Beaufort Coast			Birds Number Identification Reproduction Food Movements Behaviour		Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions	bird study
73-0017	Fisheries & Marine Service, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # seen/location # of calves # landed Identification				
73-0018	Arctic Biological Station	July 24 - 28, Sep. 17 - 20	Beaufort Coast, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Liverpool Bay	BW WW	Number # seen/location # of calves # /group # landed # dead/location Identification Morphometrics total length flipper length flipper width tail width Age scar pattern Reproduction genital structure Movements heading	Birds Number Identification Terrestrial Mammals Number Identification Pinnipeds Number Identification		Ice Coverage Type Atmosphere Wind speed Atmospheric conditions Water Column Wave climate	
73-0019	F.F. Slaney & Co. Ltd. (for Imperial	May 20 - Aug. 20	Beaufort Coast, Mackenzie Shelf, Continental Slope,	WW	Number # seen/location # /aerial transect line # of calves			Ice Coverage Type Atmosphere	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
73-0019	Continued		Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay		# /group # landed # struck and lost # /distance from aircraft # /distance from vessel Identification Reproduction genital structure Food stomach contents Movements heading swimming under ice Behaviour orientation to others orientation to waves/wind position in water			Wind speed Wind direction Water Column Temperature Turbidity	
73-0020	Game Management Service, Government of the Northwest Territories	July 04 - Aug. 09	Kugmallit Bay	WW	Number # seen/location # landed Identification Morphometrics muktuk weight meat weight	Anadromous Fish Number Identification			
73-0021	LGL Ltd. (for Alaskan Arctic Gas Study Co. & Canadian Arctic Gas Study Ltd.)	Aug. 23 - Sep. 29	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	BW	Number # seen/location Identification	Birds Number Identification Reproduction Food Movements Behaviour Dye marks		Atmosphere Precipitation Atmospheric conditions	bird study
73-0022	University of Amsterdam & Arctic Biological Station	July	Shallow Bay	HP	Number # seen/location # landed Identification Morphometrics skull length mandible length mandible height length symphysis mandibles rostrum length rostrum width breadth across supra-orbital processes zygomatic width braincase width premaxillae width temporal fossa length				

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
73-0022	Continued				temporal fossa height tip rostrum to nares length toothrow tip rostrum to pterygoid Behaviour synchrony among animals porpoising				
73-0025	Canadian Wildlife Service	Mar. 31-Apr. 25	Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf	BW WW	Number # seen/location Identification Movements heading	Ice-associated Mammals Number Identification Age Reproduction Movements		Ice Coverage Type	polar bear study
74-0028	Fisheries & Marine Service, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification Food stomach contents Parasites				see 73-0017
74-0029	Canadian Wildlife Service (for Beaufort Sea Project)	June 19 - 28	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf	BW WW	Number # seen/location # /aerial transect line # /group Identification Movements heading	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Atmospheric conditions	pinniped study
74-0030	Arctic Biological Station	July 13 - Aug. 01, Sep. 09 - 16	Mackenzie Shelf, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	BW WW	Number # seen/location # of calves # /group # landed # struck and lost # dead /location Identification tag # Morphometrics total length flipper length flipper width tail width baleen length Age overall colour Reproduction genital structure Movements	Birds Number Identification Terrestrial Mammals Number Identification Morphometrics Pinnipeds Number Identification Morphometrics		Ice Coverage Type Atmosphere Wind speed Precipitation Atmospheric conditions	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
74-0030	Continued				heading Behaviour position in water dive characteristics				
74-0031	Renewable Resources Consulting Services Ltd. (for Canadian Wildlife Service)	Apr. 21 - Oct. 18	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf, Kugmallit Bay, Liverpool Bay	BW WW	Number # seen/location # /aerial transect line # of calves Identification	Birds Number Identification Age Reproduction Food Movements Behaviour		Ice Coverage Type Atmosphere Wind speed Precipitation Atmospheric conditions Water Column Turbidity	bird study
74-0032	LGL Ltd. (for Alaskan Arctic Gas Study Co. & Canadian Arctic Gas Study Ltd.)	Aug. 24 - Sep. 30	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	BW WW	Number # seen/location # /aerial transect line Identification Movements heading	Birds Number Identification Reproduction Food Movements		Atmosphere Precipitation Atmospheric conditions	see 73-0021
74-0033	F.F. Slaney & Co. Ltd. (for Imperial Oil Ltd.* & Sun Oil Co. Ltd.)	June 19 - Sep. 08	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # seen/location # /aerial transect line # of calves # /group # landed # struck and lost # dead/location # /distance from vessel Identification Morphometrics total length Age # of dentine layers Reproduction genital structure ovary length ovary width corpora lutea # placenta present fetus present fetus length milk present Food stomach contents Parasites Movements heading	Anadromous Fish Number Identification Marine Fish Number Idertification		Ice Coverage Atmosphere Wind direction	see 74-0003 in other inventories for concurrent programs

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
74-0034	Canadian Wildlife Service	July 01 - Sep. 10	Beaufort Coast, Mackenzie Bay			Birds Number Identification		Ice Coverage	bird study
74-0035	Game Management Service, Government of the Northwest Territories	June 29 - Aug. 17	Kugmallit Bay	WW	Number # seen/location # landed Identification Morphometrics meat weight muktuk volume muktuk weight	Anadromous Fish Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions	
74-0053	Canadian Wildlife Service	Mar. 22-May 09	Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf	WW	Number # seen/location Identification Movements heading	Ice-associated Mammals Number Identification Age Reproduction Movements		Ice Coverage	see 73-0025
75-0044	Fisheries & Marine Service, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification				
75-0045	Canadian Wildlife Service (for Beaufort Sea Project)	June 12 - 20	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf	BW WW	Number # /aerial transect line # of calves Identification	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Precipitation Atmospheric conditions	see 74-0029
75-0046	F.F. Slaney & Co. Ltd. (for Sun Oil Co. Ltd.)	July 08 - Aug. 11	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # seen/location # /aerial transect line # /group # /distance from vessel Identification	Birds Number Identification Behaviour		Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions	
75-0047	Arctic Biological Station	July 10 - 28	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Eskimo Lakes	BW WW	Number # seen/location # of calves # /group # landed # dead/location # /distance from aircraft Identification Morphometrics	Birds Number Identification Behaviour Ice-associated Mammals Number Identification Age		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
75-0047	Continued				total length Age overall colour Reproduction genital structure Food presence of birds Parasites metal present Movements heading distance/time Behaviour breaching tail slapping	Food Behaviour Pinnipeds Number Identification Behaviour		Wave climate	
75-0048	LGL Ltd. (for Beaufort Sea Project)	May 09 - July 09	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Mackenzie Bay	BW WW	Number # seen/location # /group Identification	Birds Number Identification Movements Ice-associated Mammals Number Identification Terrestrial Mammals Number Identification Pinnipeds Number Identification		Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Wave climate	bird study
75-0049	LGL Ltd. (for Alaskan Arctic Gas Study Co. & Canadian Arctic Gas Study Ltd.)	Aug. 20 - Sep. 25	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	none	none	Birds Number Identification Reproduction Movements Behaviour		Atmosphere Precipitation Atmospheric conditions	see 73-0021
75-0050	F.F. Slaney & Co. Ltd. (for Imperial Oil Ltd.*)	June 23 - Aug. 07	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Eskimo Lakes	BW WW	Number # seen/location # /aerial transect line # of calves # /group # landed # struck and lost # dead/location # /distance from land Identification Morphometrics total length Age	Fish Number Birds Number Identification Terrestrial Mammals Number Identification Age Reproduction Pinnipeds Number		Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Temperature Water level Water climate	See data sets 75-0004 and 75-0011 in physical and chemical inventories for studies in some of the same

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
75-0050	Continued				# of dentine layers overall colour Reproduction genital structure corpora lutea # milk present Food stomach contents Movements heading Behaviour orientation to waves/wind disturbing mud	Identification			areas during the same time period
75-0071	Canadian Wildlife Service	Apr. 02-May 10	Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf	WW	Number # seen/location Identification	Ice-associated Mammals Number Identification Age Reproduction Movements		Ice Coverage	see 73-0025
76-0028	Canadian Wildlife Service	June 16 - 29	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf	BW WW	Number # seen/location # /aerial transect line # of calves Identification	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Atmosphere Wind speed Precipitation Atmospheric conditions	see 74-0029
76-0029	Arctic Biological Station	July 02 - 18	Beaufort Coast, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Liverpool Bay	BW WW	Number # seen/location # of calves # /group # dead/location # /distance from vessel Identification Morphometrics tail width mandible length Age overall colour Movements heading Behaviour position in water	Fish Number Birds Number Identification Terrestrial Mammals Number Identification Pinnipeds Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Water depth	
76-0030	LGL Ltd. (for Alaskan Arctic Gas Study Co. & Canadian Arctic Gas	Aug. 15 - Oct. 02	Beaufort Coast	BW	Number # /aerial transect line Identification	Birds Number Identification Age		Atmosphere Precipitation Atmospheric conditions	see 73-0021

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
76-0030 Cont'd	Study Ltd.)					Reproduction Movements Behaviour			
76-0031	F.F. Slaney & Co. Ltd. (for Imperial Oil Ltd.*)	July 21 - Aug. 04	Kugmallit Bay, Beluga Bay	WW	Number # seen/location # /distance from vessel Identification Food presence of birds Movements heading Behaviour position in water splashing spy-hopping # calls/type/time call frequency spectrum	Birds Number Identification		Water Column Current direction	
76-0032	Marex (for Canadian Marine Drilling Ltd.)	July 20 - Oct. 16	Mackenzie Shelf	WW	Number # seen/location # /group Identification	Zooplankton Number Identification Morphometrics Birds Number Identification Age Reproduction Movements Behaviour Pinnipeds Number Identification Morphometrics Age Behaviour		Ice Coverage Atmosphere Precipitation Atmospheric conditions	
76-0033	Arctic Biological Station	July	Prince Albert Sound	N	Number # dead/location Identification Morphometrics tusk length skull length maxilla length				
76-0034	F.F. Slaney & Co. Ltd. (for Imperial Oil Ltd.*)	June 27 - Aug. 16	Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Beluga Bay	BW WW	Number # seen/location # /aerial transect line # of calves # landed # dead/location # /distance from vessel	Birds Number Identification Reproduction Terrestrial Mammals Number		Ice Coverage Atmosphere Wind speed Wind direction Atmospheric conditions	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
76-0034	Continued				# /distance from land Identification Morphometrics total length Reproduction genital structure placenta present milk present Food stomach contents presence of birds Movements heading distance/time Behaviour orientation to vessel orientation to ice disturbing mud	Identification		Water Column Wave climate	
76-0035	Game Management Service, Government of the Northwest Territories	July - Aug.	Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification Morphometrics total length Reproduction genital structure				
77-0001	F.F. Slaney & Co. Ltd. (for Fisheries & Marine Service, Dep. of Fisheries & Oceans)	June 26 - Aug. 11	Mackenzie Bay, East Mackenzie Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # dead/location # /distance from vessel Identification Food presence of birds Movements heading distance/time Behaviour orientation to others orientation to vessel orientation to waves/wind position in water disturbing mud gamming spy-hopping swimming in circles rolling on side	Birds Number Identification Behaviour	Water Column Dis-solved oxygen	Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Temperature Conductivity Depth Current direction Turbidity Wave climate	
77-0036	Canadian Wildlife	June 13 - 21	Beaufort Coast,	BW	Number	Ice-associated		Ice	see

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
77-0036 Cont'd	Service		Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf	WW	# /aerial transect line # of calves Identification Movements heading	Mammals Number Identification Pinnipeds Number Identification Behaviour		Coverage Atmosphere Wind speed Atmospheric conditions	74-0029
77-0037	F.F. Slaney & Co. Ltd. (for Imperial Oil Ltd.*)	July 02 - Aug. 10	Beaufort Coast, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Minto Inlet, Prince Albert Sound, Beluga Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # landed # struck and lost # dead/location # /distance from vessel Identification Morphometrics total length flipper length flipper width tail width maximum girth girth behind flippers # teeth/jaw blubber thickness Age overall colour scar pattern Reproduction genital structure milk present Food stomach contents presence of birds Parasites Movements heading distance/time Behaviour surface time # surfacings/time # blows/surfacing orientation to vessel distance between individuals position in water disturbing mud gamming dive characteristics	Marine Fish Number Identification Birds Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Depth Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
77-0038	F.F. Slaney & Co. Ltd. (for Fisheries & Marine Service, Dep. of Fisheries & Oceans)	May 30 - July 05	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay	WW	Number # seen/location # /group Identification Movements heading distance/time swimming under ice Behaviour dive time	Birds Number Identification Movements		Ice Coverage Type Atmosphere Wind direction Atmospheric conditions Water Column Wave climate	
77-0039	Canadian Marine Drilling Ltd.	July 14 - Oct. 27	Mackenzie Shelf				Incomplete		
77-0040	Fish and Wildlife Service, Government of the Northwest Territories	July - Aug.	Mackenzie Bay	WW	Number # landed Identification Morphometrics total length maximum girth # teeth/jaw blubber thickness Reproduction genital structure				
77-0070	Canadian Wildlife Service	Apr. 30 - May 25	Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf	BW WW	Number # seen/location Identification Movements heading	Ice-associated Mammals Number Identification Age Reproduction Movements		Ice Coverage	see 73-0025
78-0008	F.F. Slaney & Co. Ltd. (for Esso Resources Canada Ltd.)	June 25 - Aug. 12	Beaufort Coast, Mackenzie Shelf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Liverpool Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # landed # struck and lost # dead/location # /distance from aircraft # /distance from vessel # /distance from land Identification Morphometrics total length flipper length flipper width maximum girth girth behind flippers tail width	Birds Number Identification Behaviour Terrestrial Mammals Number Identification Reproduction		Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Depth Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
78-0008	Continued				# teeth/jaw blubber thickness body deformity Age overall colour blubber colour colour pattern scar pattern Reproduction genital structure milk present Food stomach contents presence of birds Movements heading distance/time swimming under ice Behaviour orientation to ice edge distance between individuals position in water disturbing mud splashing breaching tail slapping head slamming gamming spy-hopping swimming in circles turning at surface				
78-0009	Fish and Wildlife Service, Government of the Northwest Territories	July	Mackenzie Bay	WW	Number # landed # struck and lost Identification Morphometrics total length flipper length flipper width maximum girth girth behind flippers tail width blubber thickness Age overall colour scar pattern Reproduction genital structure Food stomach contents				

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	

78-0015	Canadian Wildlife Service	June 13 - 25	Beaufort Coast,
			Mackenzie Shelf,
			Continental Slope,
			Canada Basin,
			Amundsen Gulf,
			Banks Is. Shelf
				BW
				WW
					Number
					  # /aerial transect line
					  # of calves
					  # /group
					Identification
					Age
					  overall colour
					Movements
					  heading
					Behaviour
					  orientation to others
					  orientation to ice edge
					  spy-hopping
						Ice-associated Mammals
						  Number
						  Identification
						Pinnipeds
						  Number
						  Identification
						  Behaviour
								Ice
								  Coverage
								  Type
								Atmosphere
								  Wind speed
								  Atmospheric conditions
									see 74-0029

78-0027	Canadian Marine Drilling Ltd.	June 23 - Nov. 04	Beaufort Coast,
			Mackenzie Shelf,
			Amundsen Gulf
				BW
				WW
					Number
					  # seen/location
					Identification
						Birds
						  Number
						  Identification
						  Age
						  Reproduction
						  Food
						  Movements
						  Behaviour
						Ice-associated Mammals
						  Number
						  Identification
						  Reproduction
						  Food
						  Behaviour
						Terrestrial Mammals
						  Number
						  Identification
						  Behaviour
						Pinnipeds
						  Number
						  Identification
						  Age
						  Food
						  Behaviour
								Ice
								  Coverage
								Atmosphere
								  Wind direction	

79-0027	National Marine Fisheries Service, U.S. Dep. of Commerce	July 23 - Aug. 27	Beaufort Coast,
			Amundsen Gulf,
			Banks Is. Shelf,
			Kugmallit Bay,
			Liverpool Bay,
			Dolphin & Union Strait
				BW
				WW
					Number
					  # seen/location
					  # of calves
					  # /group
					  # /distance from vessel
					Identification
					Movements
					  heading
						Pinnipeds
						  Number
								Ice
								  Coverage
								  Type
								Atmosphere
								  Wind speed
								  Wind direction
								  Precipitation
								  Atmospheric conditions
								Water Column
								  Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
79-0028	Canadian Wildlife Service	June 15 - 25	Beaufort Coast, Mackenzie Shelf, Continental Shelf, Canada Basin, Amundsen Gulf, Banks Is. Shelf	WW	Number # seen/location # /aerial transect line # of calves # /group Identification Movements heading	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Atmospheric conditions	see 74-0029
79-0029	University of California at Santa Cruz	Sep. 24 - Oct. 05	Beaufort Coast, Mackenzie Shelf	BW WW	Number # seen/location # of calves # /group # /distance from land Identification Movements heading distance/time Behaviour orientation to others synchrony among animals distance between individuals position in water rolling on side			Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Wave climate	
79-0030	Canadian Wildlife Service	Apr. 09 - May 07	Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf	BW	Number # seen/location Identification	Ice-associated Mammals Number Identification Age Reproduction Movements		Ice Coverage Type	see 73-0025
79-0031	Canadian Marine Drilling Ltd.	June 19 - Nov. 22	Mackenzie Shelf, Continental Slope, McKinley Bay (?)	BW WW	Number # seen/location Identification	Zooplankton Number Anadromous Fish Number Identification Morphometrics Birds Number Identification Age Reproduction Food Movements Behaviour Ice-associated Mammals Number Identification		Ice Coverage Atmosphere Wind speed	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
79-0031	Continued					Pinnipeds Number Identification Age Movements Behaviour			
79-0033	LGL Ltd. (for Canadian Marine Drilling Ltd.)	June 22 - Aug. 02	Amundsen Gulf	none	none	Birds Number Identification Age Reproduction Behaviour Terrestrial Mammals Number Identification Pinnipeds Number Identification		Ice Coverage	
79-0034	LGL Ltd. (for Esso Resources Canada Ltd.)	June 20 - Aug. 11	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, McKinley Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # landed # struck and lost # dead/location # /distance from aircraft # /distance from vessel # /distance from land Identification Morphometrics total length flipper length flipper width maximum girth tail width Age overall colour scar pattern Reproduction genital structure fetus present fetus length Food stomach contents presence of birds Movements heading Behaviour	Birds Number Identification Food		Ice Coverage Atmosphere Wind speed Precipitation Atmospheric conditions Water Column Depth Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
79-0034	Continued				orientation to others orientation to aircraft orientation to ice edge distance between individuals position in water disturbing mud splashing tail slapping head slamming gamming spy-hopping dive characteristics				
79-0035	Fish & Wildlife Service, Government of the Northwest Territories	July 02 - Aug. 16	Kugmallit Bay	WW	Number # landed # struck and lost Identification				
80-0019	National Marine Fisheries Service, U.S. Dep. of Commerce (for Bureau of Land Management*, U.S. Dep. of Interior)	July 21 - Sep. 13	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay	BW GW WW	Number # seen/location # /aerial transect line # of calves # /group # /distance from vessel Identification Morphometrics total length Age scar pattern Movements heading distance/time Behaviour dive time surface time # surfacings/time distance between individuals position in water rolling on side	Ice-associated Mammals Number Identification Pinnipeds Number Identification		Atmosphere Atmospheric conditions	
80-0020	Dep. of Fisheries & Oceans	July 05 - Aug. 23	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # seen/location # of calves # landed # struck and lost # dead/location Identification Morphometrics total length maximum girth			Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
80-0020	Continued				Age overall colour Reproduction genital structure Food stomach contents				
80-0021	National Marine Fisheries Service, U.S. Dep. of Commerce	Aug. - Sep.	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Banks Is. Shelf	BW	Number # seen/location # of calves # /group # /distance from aircraft # /distance from vessel Identification Morphometrics total length Age overall colour		Incomplete		
80-0022	Naval Ocean Systems Center (for Bureau of Land Management*, U.S. Dep. of Interior)	July 28 - Aug. 02, Sep. 08 - Oct. 24	Beaufort Coast, Mackenzie Shelf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	BW	Number # seen/location # /distance from aircraft Identification Morphometrics total length Movements heading	Pinnipeds Number Identification	Incomplete	Ice Coverage	most of study in Alaskan waters
80-0023	Canadian Marine Drilling Ltd.	May 29 - Oct. 13	Mackenzie Shelf, Continental Slope	BW WW	Number # seen/location # of calves # /group # /distance from vessel Identification Movements heading Behaviour # blows/surfacing	Birds Number Identification	Incomplete	Ice Coverage Atmosphere Atmospheric conditions	
80-0024	Canadian Wildlife Service	June 21 - July 10	Amundsen Gulf, Prince of Wales Strait	none	none	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Atmospheric conditions	see 74-0029
80-0025	LGL Ecological Research Associates Inc., New York Zoological Society	July 31 - Sep. 13	Beaufort Coast, Mackenzie Shelf, Continental Slope	BW WW	Number # seen/location # /aerial transect line # of calves	Zooplankton Number Identification Morphometrics		Ice Coverage Type Atmosphere	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
80-0025 Cont'd	& Polar Research Laboratory Inc. (for Bureau of Land Management*, U.S. Dep. of Interior)				# /group # /distance from aircraft # /distance from vessel # /distance from land Identification Age overall colour colour pattern scar pattern Food mud coming from mouth defecating Movements heading distance/time distance between tailbeats Behaviour dive time surface time time between blows # blows/surfacing # underwater blows pushes chases orientation to others orientation to vessel synchrony among individuals distance between individuals position in water disturbing mud breaching tail slapping head slamming flipper slapping mouth open forward lunges dive characteristics turning at surface # calls/whale-hour # calls/type/time call duration call frequency spectrum	Age Zoobenthos Number Identification Birds Number Identification Behaviour Pinnipeds Number Identification		Atmospheric conditions Water Column Temperature Salinity Depth Wave climate	
80-0026	LGL Ltd. (for Dome Petroleum Ltd.)	Aug. 06 - Sep. 04	Beaufort Coast, Mackenzie Shelf	BW GW WW	Number # seen/location # /aerial transect line # of calves # /group # /distance from vessel Identification Morphometrics	Birds Number Identification Pinnineds Number Identification Movements Behaviour		Ice Coverage Type Atmosphere Wind speed Atmospheric conditions Water Column	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
80-0026	Continued				calf-to-adult length ratio Age overall colour mud coming from mouth Food defecating Movements heading distance/time Behaviour surface time orientation to others orientation to vessel distance between individuals position in water disturbing mud			Wave climate	
80-0027	Dome Petroleum Ltd.	July 20 - Sep. 01	McKinley Bay	none	none	Birds Number Identification Age Reproduction Food Movements Pinnipeds Number Identification Age			
80-0028	Dome Petroleum Ltd.	May 21 - July 08	McKinley Bay	none	none	Zooplankton Identification Zoobenthos Number Identification Fish Number Identification Birds Number Identification Ice-associated Mammals Number Identification Pinnipeds Number Identification Parasites		Ice Coverage Thickness Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Temperature Salinity	
80-0029	LGL Ltd. (for Esso Resources Canada	June 19 - Aug. 13	Beaufort Coast, Mackenzie Shelf,	BW WW	Number # seen/location	Birds Number		Ice Coverage	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
80-0029 Cont'd	Ltd.)		Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, McKinley Bay		# /aerial transect line # of calves # /group # landed # struck and lost # dead/location # /distance from aircraft # /distance from vessel # /distance from land Identification Morphometrics total length tail width Age overall colour colour pattern Reproduction genital structure Food stomach contents presence of birds defecating Movements heading swimming under ice Behaviour pushes orientation to ice edge distance between individuals position in water disturbing mud splashing breaching head slamming gamming spy hopping dive characteristics	Identification Terrestrial Mammals Number Pinnipeds Number		Atmosphere Wind speed Wind direction Precipitation Atmospheric conditions Water Column Depth Wave climate	
80-0030	Canadian Wildlife Service (for Dome Petroleum Ltd., Esso Resources Canada Ltd. & Dep. of Energy, Mines & Resources)	June 05 - Sep. 10	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Banks Is. Shelf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Liverpool Bay, Prince of Wales Strait,			Birds Number Identification Age Reproduction Food Movements Behaviour		Ice Coverage Atmosphere Wind speed Wind direction	bird study

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
80-0030	Continued		Minto Inlet, Prince Albert Sound, Dolphin & Union Strait						
81-0022	Freshwater Institute, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed # struck and lost # struck, killed and lost # dead/location Identification Morphometrics total length Age # of dentine layers overall colour Reproduction genital structure fetus present fetus length milk present Food stomach contents			Atmosphere Wind speed Atmospheric conditions Water Column Wave climate	
81-0023	LGL Ltd. (for Esso Resources Canada Ltd., Dome Petroleum Ltd. & Gulf Canada Resources Inc.)	June 15 - Aug. 05	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, Liverpool Bay, McKinley Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # landed # dead/location # /distance from aircraft # /distance from vessel Identification Morphometrics total length Age overall colour Reproduction genital structure Food presence of birds Movements heading distance/time swimming under ice Behaviour orientation to others orientation to vessel orientation to ice edge distance between individuals	Birds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Depth Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
81-0023	Continued				position in water disturbing mud splashing breaching tail slapping gamming swimming in circles dive characteristics				
81-0024	Canadian Wildlife Service	June 15 - 22	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Prince of Wales Strait, Prince Albert Sound	WW	Number # /aerial transect line Identification Movements heading	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Atmospheric conditions	see 74-0029
81-0025	Canadian Marine Drilling Ltd.	June 26 - Oct. 30	Mackenzie Shelf, McKinley Bay	BW WW	Number # seen/location # of calves # dead/location # /distance from vessel Identification Movements heading	Birds Number Identification Age Reproduction Food Movements Behaviour Ice-associated Mammals Number Identification Movements Terrestrial Mammals Number Identification Behaviour Pinnipeds Number Identification Age Food Behaviour		Water Column Depth	
81-0026	LGL Ltd. (for Sohio Alaska Petroleum Co., Dome Petroleum Ltd., Arco Alaska Inc., BP Alaska Exploration Inc., Chevron U.S.A.	July 18 - Sep. 14	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf,	BW WW	Number # seen/location # /aerial transect line # of calves # /group # /distance from aircraft Identification	Incomplete		Ice Coverage Type Atmosphere Wind speed Precipitation Atmospheric	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
81-0026 Cont'd	Inc., Exxon Co. U.S.A., Phillips Petroleum Co., Shell Oil Co., State of Alaska, Esso Resources Canada Ltd. & Gulf Canada Resources Inc.)		Prince of Wales Strait, Minto Inlet, Prince Albert Sound		Morphometrics total length tail width snout-to-blowhole length Age colour pattern scar pattern Food mud coming from mouth defecating Movements heading distance/time Behaviour dive time surface time time between blows # blows/surfacing # underwater blows distance between individuals position in water			conditions Water Column Wave climate	
81-0027	LGL Ecological Research Associates Inc., New York Zoological Society & Polar Research Laboratory Inc. (for Bureau of Land Management*, U.S. Dep. of Interior)	July 28 - Sep. 13	Beaufort Coast, Mackenzie Shelf	BW GW WW	Number # seen/location # /aerial transect line # of calves # /group # /distance from aircraft # /distance from vessel # /distance from land Identification Morphometrics calf-to-adult length ratio Age colour pattern scar pattern Food mud coming from mouth defecating Movements heading distance/time swimming under ice distance between tail beats Behaviour dive time surface time time between blows # blows/surfacing # underwater blows nudges	Zooplankton Number Identification Age Zoobethos Number Identification Fish Number Identification Age Pinnipeds Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Temperature Conductivity Depth Turbidity Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
81-0027	Continued				pushes chases orientation to others orientation to vessel synchrony among animals distance between individuals position in water breaching tail slapping flipper slapping mouth open forward lunges rolling on side dive characteristics turning at surface log pushing log clasping rolling log along body mating # calls/whale-hour # calls/type/time call duration call frequency spectrum				
81-0052	Naval Ocean Systems Center	Sep. 12 - 20	Beaufort Coast, Mackenzie Shelf	BW	Number # seen/location # of calves # /group Identification Movements heading Behaviour dive time surface time Incomplete	Ice-associated Mammals Number Idertification Pinnipeds Number Identification	Incomplete	Ice Coverage Atmosphere Atmospheric conditions Water Column Wave climate	see 80-0022
82-0001	LGL Ltd. (for Esso Resources Canada Ltd., Dome Petroleum Ltd. & Gulf Canada Resources Inc.)	June 24 - July 19	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay, McKinley Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # landed # dead/location # /distance from aircraft # /distance from vessel # /distance from land Identification Age overall colour Food presence of birds	Birds Number Identification Behaviour Pinnipeds Number Identification		Ice Coverage Atmosphere Wind speed Wind direction Atmospheric conditions Water Column Temperature Depth Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CHEMICAL	PHYSICAL	REMARKS
82-0001	Continued				Movements heading Behaviour orientation to others orientation to vessel orientation to ice edge distance between individuals position in water disturbing mud splashing head slamming spy-hopping swimming in circles dive characteristics				
82-0007	Freshwater Institute, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed # struck and lost Identification Morphometrics total length Age # of dentine layers Reproduction genital structure gonad length gonad width gonad depth gonad weight gonad volume sperm present spermatogenesis stages corpora lutea # corpora albicantia # fetus present fetus length Food stomach contents	Incomplete			
82-0008	LGL Ecological Research Associates Inc. (for Minerals Management Service, U.S. Dep. of Interior)	Aug. 01 - 31	Beaufort Coast, Mackenzie Shelf, Amundsen Gulf, Kugmallit Bay, East Mackenzie Bay	BW GW WW	Number # seen/location # of calves # /group # /distance from aircraft # /distance from vessel Identification Age colour pattern scar pattern Food mud coming from mouth	Birds Number Identification Behaviour Pinnipeds Number Identification		Ice Coverage Type Atmosphere Wind speed Atmospheric conditions Water Column Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
82-0008	Continued				defecating Movements heading distance/time distance between tail beats Behaviour dive time surface time time between blows # blows/surfacing # underwater blows chases orientation to others orientation to vessel orientation to windrows synchrony among animals distance between individuals position in water breaching tail slapping flipper slapping mouth open forward lunges rolling on side dive characteristics turning at surface log lifting log pushing log clasping rolling log along body nursing # calls/whale-hour # calls/type/time call duration call frequency spectrum call intensity pulse rate				
82-0009	LGL Ltd. (for National Marine Fisheries Service, U.S. Dep. of Commerce)	Aug. 12 - Sep. 05	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Mackenzie Bay	BW	Number # seen/location # /aerial transect line # of calves # /distance from aircraft Identification Morphometrics total length tail width snout-to-blowhole length Age colour pattern scar pattern	Incomplete		Ice Coverage Type Atmosphere Atmospheric conditions Water Column Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
82-0009	Continued				Movements heading distance/time Behaviour orientation to others distance between individuals position in water				
82-0010	ESL Environmental Sciences Ltd. (for Dome Petroleum Ltd. & Gulf Canada Resources Inc.)	Aug. 18 - Sep. 13	Beaufort Coast, Mackenzie Shelf, Continental Slope	BW WW	Number # /aerial transect line # of calves # /group # /distance from aircraft Identification Age overall colour colour pattern Food presence of birds mud coming from mouth Movements heading distance/time Behaviour orientation to others distance between individuals position in water mouth open turning at surface	Birds Number Identification Pinnipeds Number Identification Age Behaviour		Ice Coverage Atmosphere Wind speed Precipitation Atmospheric conditions Water Column Wave climate	
82-0011	Canadian Wildlife Service (for Dome Petroleum Ltd. & Gulf Canada Resources Inc.)	June 19 - 24	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Kugmallit Bay, Prince of Wales Strait, Minto Inlet, Prince Albert Sound	WW	Number # /aerial transect line # /group Identification Movements heading	Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions	
82-0029	Canadian Marine Drilling Ltd.	June 23 - Sep. (?)	Mackenzie Shelf, McKinley Bay	BW WW	Number # seen/location # /group # dead/location # /distance from vessel Identification Movements heading	Birds Number Identification Age Reproduction Food Movements Behaviour		Ice Coverage Atmosphere Wind speed Wind direction Atmospheric conditions	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
82-0029	Continued				distance/time	Ice-associated Mammals Number Identification Pinnipeds Number Identification Behaviour			
82-0049	Naval Ocean Systems Center (for Minerals Management Service, U.S. Dep. of Interior)	Aug. 02 - Oct. 15	Beaufort Coast, Mackenzie Shelf, Continental Slope	BW WW	Number # seen/location # of calves # /group # /distance from aircraft Identification Morphometrics total length Age overall colour mud on skin Food clear trail behind whale Movements heading distance/time Behaviour orientation to others synchrony among animals distance between individuals position in water breaching tail slapping swimming in circles mouth open nursing # calls/whale-hour # calls/type/hour	Pinnipeds Number Identification		Ice Coverage Type Atmosphere Precipitation Atmospheric conditions Water Column Wave climate	see 80-0022
83-0024	LGL Ecological Research Associates Inc. (for Minerals Management Service, U.S. Dep. of Interior)	Aug. 01 - Sep. 01	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	BW WW	Number # seen/location # of calves # /group # /distance from aircraft # /distance from vessel # /distance from land Identification Age overall colour colour pattern scar pattern Food	Birds Number Identification Behaviour		Ice Coverage Atmosphere Atmospheric conditions Water Column Depth Turbidity Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
83-0024	Continued				mud coming from mouth defecating Movements heading distance/time Behaviour dive time surface time time between blows # blows/surfacing # underwater blows nudges chases slaps orientation to others orientation to vessel orientation to windrows distance between individuals position in water breaching tail slapping flipper slapping spy-hopping swimming in circles mouth open forward lunges rolling on side dive characteristics turning at surface # calls/whale-hour # calls/type/time call intensity				
83-0025	Ian Robertson Consulting Ltd. (for Esso Resources Canada Ltd., Dome Petroleum Ltd. & Gulf Canada Resources Inc.)	June 20 - July 20	Beaufort Coast, Mackenzie Shelf, Mackenzie Bay, Kugmallit Bay	WW	Number # seen/location # /aerial transect line # of calves # /group # /distance from aircraft # /distance from vessel # /distance from land Identification Food presence of birds Movements heading Behaviour orientation to vessel orientation to ice edge distance between individuals	Birds Number Identification		Ice Coverage Type Atmosphere Wind direction Atmospheric conditions	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS BIOLOGICAL	CONCURRENT MEASUREMENTS CHEMICAL	CONCURRENT MEASUREMENTS PHYSICAL	REMARKS
83-0025	Continued				dive characteristics				
83-0026	Cascadia Research Collective (for National Marine Fisheries Service, U.S. Dep. of Commerce)	Aug. 07 - Sep. 06	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin, Amundsen Gulf, Banks Is. Shelf, Kugmallit Bay, Franklin Bay	BW WW	Number # seen/location # of calves # /group # /distance from aircraft Identification Morphometrics total length tail width snout-to-blowhole length Age colour pattern scar pattern Movements heading Behaviour position in water Incomplete			Ice Coverage Atmosphere Atmospheric conditions Water Column Wave climate	
83-0027	LGL Ltd. (for Dome Petroleum Ltd. and Gulf Canada Resources Inc.)	Aug. 19 - Sep. 11	Beaufort Coast, Mackenzie Shelf, Continental Slope, Kugmallit Bay	BW WW	Number # seen/location # /aerial transect line # of calves # /group # /distance from aircraft Identification Morphometrics total length Age overall colour Movements heading distance/time Behaviour position in water	Birds Number Identification Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Atmospheric conditions Water Column Temperature Turbidity Wave climate	
83-0028	Naval Ocean Systems Center (for Minerals Management Service, U.S. Dep. of Interior)	May 09 - 11, Aug. 02 - Oct. 05	Beaufort Coast, Mackenzie Shelf, Continental Slope, Canada Basin	BW WW	Number # seen/location # of calves # /group # /distance from aircraft Identification Morphometrics total length Age overall colour mud on skin Movements heading distance/time	Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Precipitation Atmospheric conditions Water Column Wave climate	see 80-0022

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
83-0028	Continued				Behaviour surface time # underwater blows distance between individuals position in water breaching gamming spy-hopping mouth open turning at surface # calls/whale-hour # calls/type/time call duration call frequency spectrum call intensity				
83-0029	Canadian Wildlife Service	June 16 - 27	Beaufort Coast, Mackenzie Shelf, Continental Slope, Amundsen Gulf, Kugmallit Bay, Prince of Wales Strait, Minto Inlet, Prince Albert Sound	BW WW	Number # /aerial transect line # /group Identification Movements heading	Ice-associated Mammals Number Identification Reproduction Pinnipeds Number Identification Behaviour		Ice Coverage Type Atmosphere Wind speed Wind direction Atmospheric conditions	
83-0030	Canadian Marine Drilling Ltd.	July 03 (?) - Oct. 20 (?)	Mackenzie Shelf	BW WW	Number # seen/location # /group # /distance from vessel Identification Incomplete	Ice-associated Mammals Number Identification Reproduction Pinnipeds Number Identification Behaviour	Incomplete	Ice Coverage	
83-0031	Freshwater Institute, Dep. of Fisheries & Oceans	July - Aug.	Beaufort Coast, Mackenzie Bay, Kugmallit Bay, East Mackenzie Bay	WW	Number # landed Identification Morphometrics total length flipper length flipper width girth behind flippers tail width snout-to-blowhole length snout-to-anus length snout-to-genital slit length			Atmosphere Precipitation Atmospheric conditions Water Column Wave climate	

DATA SET I.D.	COLLECTING AGENCY	COLLECTING PERIOD	AREA	TAXA REPORTED	WHALE MEASUREMENTS OR OBSERVATIONS	CONCURRENT MEASUREMENTS			REMARKS
						BIOLOGICAL	CHEMICAL	PHYSICAL	
83-0031	Continued				snout-to-umbilicus length snout-to-flipper length snout-to-eye length snout-to-ear length # teeth/jaw Age # of dentine layers overall colour Reproduction genital structure gonad length gonad width gonad depth gonad volume gonad weight sperm present spermatogenesis stages corpora lutea # corpora albicantia # milk present fetus present fetus length Food stomach contents Parasites				

* See information in preface to table.

8.2 DATA INVENTORY TABLE 2: WHALE MEASUREMENTS, SAMPLING INTENSITY AND METHODOLOGY, AND RATING

Data Inventory Table 2 presents details about each of the specific measurements in each data set. Data sets are in chronological order according to identification number. Data sets with no actual whale measurements are not listed here. Information on the measurements contained in each column and the abbreviations used are given below by column. Abbreviations used throughout the table are:

NA = not applicable; and

NS = not specified.

DATA SET I.D.

Each identification (I.D.) number is unique to a data set; all subsequent references to data sets are by I.D. numbers. The first two digits of the I.D. refer to the last two digits of the year that data collection commenced; the last four digits are assigned to the data set. The subscript$_{18}$ indicates data sets obtained in the 1800s.

SPECIES

Only whale and porpoise species for which measurements were inventoried are listed. The abbreviations used are:

BW = bowhead whale (Balaena mysticetus);

GW = gray whale (Eschrichtius robustus);

HP = harbour porpoise (Phocoena phocoena);

KW = killer whale (Orcinus orca);

N = narwhal (Monodon monoceros); and,

WW = white whale (Delphinapterus leucas).

MEASUREMENTS

Specific measurements for each species are listed by data set. The measurements are organized by category, as in Data Inventory Table 1, but category names are not indicated.

UNITS

This column indicates the unit(s) used when obtaining each measurement. All of the units used for each measurement have been indicated; "or" has been used to separate different units. Slashes separate different parts of the same unit. Commas have been used between slashes to separate the different entities used for one part of a unit. Metric units have been abbreviated; Imperial units have been spelled out. "Description" has been used to indicate when a series of several entities has served as one unit. "Relative" indicates the use of imprecise units, such as "few", "many", "small", "large".

NO. OF SAMPLES

For most measurements, this column indicates the number of whales sampled. Exceptions include:

# seen/location for which # of sightings is indicated;

#/aerial transect line for which # of lines surveyed is indicated:

#/group for which # of groups is indicated;

behaviour measurements, other than call measurements, for which # of sightings is indicated; and

call measurements for which length of time of analyzed recording is indicated.

For some data sets, only the relative frequency of occurrence of a measurement is given in the report, and these are indicated. Abbreviations used include:

A = always;

F = frequently; and

R = rarely.

COLLECTION

The sampling methods used to obtain the data are detailed in this column. Abbreviations include:

RAS; W; X m; Y km/h; Z km = reconnaissance aerial survey; "W" type of aircraft used; flown at "X" altitude in metres; ground speed of "Y" kilometres per hour; transect width of "Z" kilometres.

RVS; M; N m; O km/h; P km = reconnaissance vessel survey; "M" type of vessel used; observation point "N" metres above sea level; speed of "O" kilometres per hour; transect width of "P" kilometres.

SAS; A; B m; C km/h; D km = systematic aerial survey; "A" type of aircraft used; flown at "B" altitude in metres; ground speed of "C" kilometres per hour; transect width of "D" kilometres.

All the types of aircraft or vessels used, and the range of altitudes maintained, or speeds used, or transect widths surveyed are indicated.

STORAGE

Details of the form of storage of the observation (e.g., photographs) or tissue (e.g., 10% formalin) are described.

ANALYSIS

Techniques used to assess details on photographs or to analyze tape recordings have been given. This column does not indicate statistical analyses performed on the data.

PRECISION/ACCURACY

If repeated measurements were made on a sample, the level of random error (precision) is indicated. If the technique was tested against a known standard, the level of systematic error (accuracy) is given. Approximations or estimations of the level of reliability of the data (precision and accuracy) are given in some instances. For most measurements, precision and accuracy were not determined.

RATING

A rating is assigned to each measurement using the criteria outlined in the appropriate flow chart in section 6.3 of the text. The rationale for each criteria is outlined in section 6.4. Each "0" and "1" rating and some "2" ratings are explained, often by numbered notes. Data with low levels of precision and/or accuracy received a "1" rating; no specific note is referenced. "See Appendix" is used when additional information pertinent to rating the data is given in Appendix 1. If different values for one type of measurement received different ratings (e.g., some values of dive times were for recognized individuals and other values assumed only one whale was in the viewing area), then both ratings are indicated.

Identification measurements are not rated. Numbered notes have been defined as follows:

Note 2 = Observers did not have experience making the measurement;

Note 4 = Measurement (or its unit) has multiple interpretations;

Note 5 = Species was not adequately indicated;

Note 8 = Individual whales were not recognized;

Note 9 = This type of measurement may not be included in this data set;

Note 12 = Information was recalled and recorded after the event;

Note 14 = Platform (plane or vessel) or instrument used was inappropriate;

Note 16 = Observation conditions were not recorded;

Note 17 = Yaw of plane was not recorded; and

Note 18 = A partial measurement was made and extrapolated to the whole.

REMARKS

Additional comments which describe sampling intensity and/or methodology, but have little or no effect on the ratings, are given in this column. Comments common to several data sets are indicated by numbered notes, defined as follows:

Note 1 = Whale measurements were incidental to program objectives;

Note 3 = Range of values was indicated with no indication of the number of data points and/or the actual values;

Note 6 = Mean or average value was given;

Note 7 = Data on whales from a stock outside the study area may be included;

Note 10 = Reported number of data points was probably larger than actual number because data were pooled from several data sets or from several measurements;

Note 11 = Maximum and/or minimum value of measurement for species indicated;

Note 13 = Specific locations were calculated using ground speed and elapsed time;

Note 15 = Off-transect animals were recorded;

Note 19 = Reported number of data points was probably smaller than actual number; and,

Note 20 = Samples were measured in field, then preserved and measured again in laboratory.

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
$_{18}$48-0001	BW	# seen/location	relative/general or relative/general/ season	2	RVS; barge; NS; NS; NS Hunters' interviews	NA	NA	NS	2	Note 1
		# landed	whales/season	3	Hunters' interviews	NA	NA	NS	2	Notes 3,6
		# dead/location	relative/general	1	RVS; barge; NS; NS; NS	NA	NA	NS	2 Note 5	Note 1
		identification	hues	F	Visual observation from vessel Hunters' interviews	NA	NA	NA	NA	Note 1
		overall colour	hues	5	Visual observation from vessel Hunters' interviews	NA	NA	NS	2	Note 1
	WW	# seen/location	relative, whales /general or relative /general/season	3	RVS; barge; NS; NS; NS Hunters' interviews	NA	NA	NS	2	Note 1
		# dead/location	relative/general	1	RVS; barge; NS; NS; NS	NA	NA	NS	2 Note 5	Note 1
		identification	hues	F	Visual observation from vessel Hunters' interviews	NA	NA	NA	NA	Note 1
		overall colour	hues	3	Visual observation from vessel Hunters' interviews	NA	NA	NS	2	Note 1
$_{18}$50-0001	BW	# seen/location	relative, whales /general	2	RVS; 400 ton sailing ship; NS; NS; NS	NA	NA	NS	2 Note 5	Note 1
		# landed	whales/season	1	Hunters' interviews	NA	NA	NS	2	
		identification	relative size or whalebone	F	Visual observation from vessel Hunters' interviews	NA	NA	NA	NA	Note 1
		heading	compass points	1	Visual observation from vessel	NA	NA	NS	2 Note 5	Note 1
	WW	# seen/location	relative, minimum, whales/general	4	RVS; 400 ton sailing ship; NS; NS; NS	NA	NA	NS	2 Note 5	Note 1
		identification	relative size	F	Visual observation from vessel	NA	NA	NA	NA	Note 1
		heading	compass points	1	Visual observation from vessel	NA	NA	NS	2 Note 5	Note 1

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
$_{18}$88-0001	BW	# seen/location	relative/general or presence/general /season	4	NS	NA	NA	NS	2 Note 9	
		# landed	relative, whales /season	4	NS	NA	NA	NS	2 Note 9	
		identification	species	A	NS	NA	NA	NA	NA	
		baleen weight	minimum pounds /season	1	NS	NA	NA	NS	2 Note 9	
$_{18}$88-0002	BW	# seen/location	relative, whales /general/ship	2	Whalers' records	NA	NA	NS	2	
		# landed	whales/ship/voyage	8	Whalers' records	NA	NA	NS	2	Note 7
		identification	species	A	Whalers' records NS	NA	NA	NA	NA	
		tail width	feet	1	Whalers' records	NA	NA	NS	2	
		baleen weight	relative, pounds/ season or pounds/ whale	5	Whalers' records	NA	NA	NS	2	Note 7
		total weight	tons	1	NS	NA	NA	NS	2	Note 6
		distance/dive	yards/dive	1	NS	NA	NA	NS	2	Note 6
		# blows/surfacing	blows/surfacing	1	NS	NA	NA	NS	2	Note 6
$_{18}$89-0001	BW	# landed	whales/general/month or whales/ship/ voyage	1665 voyages	Whalers' records	NA	NA	NS	1,2 See Appendix	Notes 7,10
		# struck, killed and lost	relative to other species	1	NS	NA	NA	NS	2 See Appendix	Note 7
		identification	species	A	Whalers' records NS	NA	NA	NA	NA	
$_{18}$89-0002	BW	# seen/location	NS/ship/1' lat. & 1-5' long.	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
		# of calves	NS	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
		# /group	NS	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
		# landed	whales/ship/season, 1' lat. & 1-5' long.	94 voyages	Whalers' records Whalers' interviews	NA	NA	NS	2	Note 10
		# struck and lost alive	whales/ship/1' lat. & 1-5' long.	94 voyages	Whalers' records	NA	NA	NS	2 See Appendix	Note 10
		# struck, killed and lost	whales/ship/1' lat. & 1-5' long.	94 voyages	Whalers' records	NA	NA	NS	2 See Appendix	Note 10

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
$_{18}$89-0002 Cont'd		# dead/location	NS/1' lat. & 5' long.	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
		identification	species	A	Whalers' records Whalers' interviews	NA	NA	NA	NA	
		baleen weight	pounds/season, whale	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
		oil volume	barrels/season,whale	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
		genital structure	male, female	94 voyages	Whalers' records	NA	NA	NS	2	Note 10
$_{18}$89-0003	BW	# seen/location	presence/general	1	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/season	2	Whalers' interviews	NA	NA	NS	2	
		identification	species	A	Acoustics Whalers' interviews Field examination	NA	NA	NA	NA	
		colour pattern	description	1	Field examination	NA	NA	NS	2 Note 9	
		baleen colour	description	1	Field examination	NA	NA	NS	2 Note 9	
$_{18}$90-0001	BW	# seen/location	presence/general	F	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/day, period, season	7	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2,4	
		identification	species	A	Visual observation from vessel Whalers' interviews Field examination	NA	NA	NA	NA	
		baleen weight	pounds	2	Field examination	NA	NA	NS	2	
$_{18}$91-0001	BW	# seen/location	presence/general	F	Whalers' records	NA	NA	Distance within 20 km	2	
		# landed	whales/ship/season	1	Whalers' records	NA	NA	NS	2	
		identification	species	A	Whalers' records	NA	NA	NA	NA	
$_{18}$93-0001	BW	# seen/location	presence/general	F	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/day, period, season	5	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
[18]93-0001 Cont'd		identification	species	A	Visual observation from vessel Whalers' interviews Field examination NS	NA	NA	NA	NA	
		length of gum	inches	2	NS	NA	NA	NS	2 Note 9	Note 6
		blubber thickness	inches	2	NS	NA	NA	NS	2 Note 9	Note 3
		# baleen plates	plates/upper jaw	2	NS	NA	NA	NS	2 Note 9	Note 3
		baleen weight	pounds/whale or total pounds for 13 whales	4	Field examination NS	NA	NA	NS	2	Note 6, 2 contradictory total weights given for 13 whales
		tenderloin weight	pounds	2	NS	NA	NA	NS	2 Note 9	Note 3
		oil volume	barrels/whale or total barrels for 13 whales	2	Field examination NS	NA	NA	NS	2	Note 6
		food	presence, identified to suborder	1	NS	NA	NA	NS	2 Note 9	
[18]93-0002	BW	# seen/location	presence, whales /general/ship	4	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2	
		# landed	whales/ship/day, period, season	11	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2,4	
		# struck and lost	relative or whales	3	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Whalers' interviews NS	NA	NA	NA	NA	
		total length	feet	3	NS	NA	NA	NS	2 Note 9	Note 3
		flipper length	feet	1	NS	NA	NA	NS	2 Note 9	Note 11
		flipper width	feet	2	NS	NA	NA	NS	2 Note 9	Note 3

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
$_{18}$93-0002 Cont'd		tail width	feet	1	NS	NA	NA	NS	2 Note 9	
		blubber thickness	inches	1	NS	NA	NA	NS	2 Note 9	Note 6
		baleen length	inches	3	NS	NA	NA	NS	2 Note 9	Note 3
		# baleen plates	plates/whale	1	NS	NA	NA	NS	2 Note 9	Note 6
		baleen weight	pounds/whale	1	Whalers' interviews	NA	NA	NS	2 Note 9	
		blubber weight	relative to other species	1	NS	NA	NA	NS	2 Note 9	
		oil volume	barrels/whales	2	Field examination NS	NA	NA	NS	2 Note 9	Note 11
		overall colour	hue	1	Whalers' interviews	NA	NA	NS	2 Note 9	
		food	presence, identified to class	1	NS	NA	NA	NS	2 Note 9	
		heading	description	1	NS	NA	NA	NS	2 Note 9	
		distance/time	miles/hour	2	NS	NA	NA	NS	2 Note 9	Note 6
		dive time	relative, minutes/ dive	4	NS	NA	NA	NS	2 Note 9	Note 3
		surface time	minutes/surfacing	3	NS	NA	NA	NS	2 Note 9	Note 3
		# blows/surfacing	blows/surfacing	2	NS	NA	NA	NS	2 Note 9	Note 3
		position in water	description	1	NS	NA	NA	NS	2 Note 9	
$_{18}$94-0001	BW	# landed	whales/ship/season	4	NS	NA	NA	NS	2	Note 3
		# dead/location	whales/general	1	RS by foot	NA	NA	NS	2	
		identification	species	A	Field examination NS	NA	NA	NA	NA	
$_{18}$94-0002	BW	# seen/location	presence, relative, whales/general, 1' lat. & 1' long. or relative/general/ season	43	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2	
		# of calves	calves	2	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
[18]94-0002 Cont'd		# landed	whales/ship, ships/ day, period, season	30	RVS; whaling vessel; NS; NS; NS Whalers' interviews NS	NA	NA	NS	2,4	Note 3
		# struck and lost	whales/ship	3	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	Note 7
		# dead/location	whales/general	1	NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Acoustics Whalers' interviews Field examination NS	NA	NA	NA	NA	
		baleen weight	pounds/whale or total pounds for 69 whales	6	Field examination Whalers' interviews	NA	NA	NS	2	Note 6, 2 contradictory weights given for 1 whale
		oil volume	barrels/whale	4	Field examination	NA	NA	NS	2	Note 11
		heading	relative to wind or compass points	4	Visual observation from vessel	NA	NA	NS	2	
[18]95-0001	BW	# seen/location	whales/general/ season	1	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship, ships/ season	2	RVS; whaling vessel; NS; NS; NS NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Field examination NS	NA	NA	NA	NA	
		total length	feet	2	NS	NA	NA	NS	2 Note 9	Note 6
		head length	relative to total length	2	NS	NA	NA	NS	2 Note 9	Note 6
		lip length	feet	2	NS	NA	NA	NS	2 Note 9	Note 6
		baleen length	feet	1	NS	NA	NA	NS	2 Note 9	Note 11
		# baleen plates	plates/side of upper jaw	2	NS	NA	NA	NS	2 Note 9	Note 6
		baleen weight	pounds/whale	2	Field examination NS	NA	NA	NS	2	Note 6

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
1895-0001 Cont'd		lip weight	tons/whale	1	NS	NA	NA	NS	2 Note 9	Note 6
		tongue and lower jaw weight	tons/whale	1	NS	NA	NA	NS	2 Note 9	Note 6
		oil volume	barrels/whale	2	Field examination NS	NA	NA	NS	2	
		food	presence, identified to suborder	1	NS	NA	NA	NS	2 Note 9	
		dive time	minutes/dive	1	NS	NA	NA	NS	2 Note 9	Note 6
		surface time	minutes/surfacing	1	NS	NA	NA	NS	2 Note 9	Note 6
		mouth open	description	1	NS	NA	NA	NS	2 Note 9	
1897-0001	BW	# seen/location	presence, relative/ general or relative/general/ ship	F	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2	
		# of calves	calves	1	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/day, period, season, voyage	24	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2,4	Note 3
		# struck and lost	relative, whales/ day, period	5	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# dead/location	whales/general	2	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Acoustics Whalers' interviews Field examination	NA	NA	NA	NA	
		baleen length	inches/plate	1	Field examination	NA	NA	NS	2	
1899-0001	BW	# seen/location	presence, whales /general, 1' lat. & 1' long.	3	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/day, period	9	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
1099-0001 Cont'd		identification	species	A	Visual observation from vessel Whalers' interviews Field examination	NA	NA	NA	NA	
		baleen weight	pounds/whale	1	Field examination	NA	NA	NS	2	
00-0001	BW	# seen/location	presence, relative, whales/general	13	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/day, season	6	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2,4	
		identification	species	A	Whalers' interviews Visual observation from vessel Field examination	NA	NA	NA	NA	
		baleen weight	pounds/whale or total pounds for 5 whales	3	Whalers' interviews Field examination	NA	NA	NS	2	
00-0002	BW	# seen/location	presence, relative, whales/general	3	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/day, season	6	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel NS	NA	NA	NA	NA	
		genital structure	male, female	2	NS	NA	NA	NS	2 Note 9	
02-0001	BW	# seen/location	presence, whales /general	4	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/ship/day, period	6	RVS; whaling vessel; NS; NS; NS Visual observation from vessel	NA	NA	NS	2	
		# struck and lost	whales/day, period	3	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel	NA	NA	NA	NA	
03-0002	BW	# seen/location	relative, whales /general	37	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
03-0002 Cont'd		# /group	whales/group	1	Visual observation from vessel	NA	NA	NS	2	
		# landed	whales/ship/day, period	34	RVS; whaling vessel; NS; NS; NS Whalers' interviews	NA	NA	NS	2,4	Note 7
		# struck and lost	whales/day	3	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Whalers' interviews Field examination	NA	NA	NA	NA	
		baleen weight	pounds/whale or total pounds for 5 whales	5	Field examination	NA	NA	NS	2	2 contradictory total weights given
		oil volume	barrels/whale	1	Field examination	NA	NA	NS	2	
		heading	compass points	1	Visual observation from vessel	NA	NA	NS	2	
03-0003	BW	# landed	whales/ship	1	Whalers' interviews	NA	NA	NS	2	
		identification	species	A	Whalers' interviews	NA	NA	NA	NA	
08-0003	BW	# seen/location	relative/general /season	7	NS	NA	NA	NS	2 Note 9	
		# landed	whales/ship/season, voyage	5	NS	NA	NA	NS	2	
		# dead/location	relative, whales /general	3	NS	NA	NA	NS	2 Note 9	
		identification	species	A	NS	NA	NA	NA	NA	
		total length	feet	1	NS	NA	NA	NS	2	
		flipper length	inches	1	NS	NA	NA	NS	2	
		tail width	inches	1	NS	NA	NA	NS	2	
		baleen length	feet	1	NS	NA	NA	NS	2	Note 11
		baleen weight	pounds	1	NS	NA	NA	NS	2	
		oil volume	barrels	1	NS	NA	NA	NS	2 Note 9	Note 11
		mud on skin	description	1	NS	NA	NA	NS	2 Note 9	
		heading	compass points	2	NS	NA	NA	NS	2 Note 9	
		dive time	minutes/dive	2	NS	NA	NA	NS	2 Note 9	Note 3
		# blows/time	blows/minutes, period	3	NS	NA	NA	NS	2 Note 9	Note 3

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
08-0003 Cont'd		dive characteristics	description	1	NS	NA	NA	NS	2 Note 9	
		position in water	description	2	NS	NA	NA	NS	2 Note 9	
	WW	# seen/location	relative/general/ season	2	NS	NA	NA	NS	2 Note 9	
		# landed	whales/location/ month	2	NS	NA	NA	NS	2 Note 9	
		identification	species	A	NS	NA	NA	NA	NA	
		heading	description or compass points	2	NS	NA	NA	NS	2 Note 9	
		breaching	relative	1	NS	NA	NA	NS	2 Note 9	
10-0003	BW	# seen/location	presence/general	1	RVS; whaling vessel; NS; NS; NS	NA	NA	NS	2 Note 9	
		# landed	whales/ship	1	Whalers' interviews	NA	NA	NS	2	
		identification	species	A	Whalers' interviews NS	NA	NA	NA	NA	
13-0001	BW	# dead/location	whales/general	1	RS by foot over ice	NA	NA	NS	2	
		identification	amount of meat on carcass	A	NS	NA	NA	NA	NA	
	WW	# seen/location	presence, relative /general	R	RS by foot over ice	NA	NA	NS	2	
		# /group	relative	2	Visual observation from ice	NA	NA	NS	2	
		identification	species	F	Visual observation from ice	NA	NA	NA	NA	
		heading	compass points	4	Visual observation from ice	NA	NA	NS	2	
		breaking ice with back	description	1	Visual observation from ice	NA	NA	NS	2	
42-0002	BW	# seen/location	relative/general /season	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
	WW	# seen/location	relative/general /season	1	NS	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
42-0002 Cont'd		# landed	relative/season	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
51-0002	BW	# seen/location	whales/general	2	RVS; NS; NS; NS; NS Incidental reports	NA	NA	NS	2 1 sighting - Note 9	
		# /group	whales/group	1	Visual observation from vessel	NA	NA	NS	2	
		# landed	relative/location	1	NS	NA	NA	NS	2 Note 9	
		# dead/location	whales/general	1	NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel NS	NA	NA	NA	NA	
	WW	# seen/location	presence/general /season	1	NS	NA	NA	NS	2 Note 9	
		# landed	whales/location/day	1	NS	NA	NA	NS	2 Note 9	
		identification	species	A	NS	NA	NA	NA	NA	
53-0013	BW	# seen/location	whales/general	1	RVS; schooner; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel	NA	NA	NA	NA	
		heading	relative	1	Visual observation from vessel	NA	NA	NS	2	
	WW	# seen/location	whales/general	1	RVS; schooner; NS; NS; NS	NA	NA	NS	2	
		# of calves	calves	1	RVS; schooner; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel	NA	NA	NA	NA	
		overall colour	hue	1	Visual observation from vessel	NA	NA	NS	2	
54-0003	BW	# seen/location	presence/general /voyage	1	RVS; icebreaker; NS; NS; NS	NA	NA	NS	2 Note 9	
		identification	species	A	Visual observation from vessel	NA	NA	NA	NA	
	WW	# seen/location	presence/general /voyage	1	RVS; icebreaker; NS; NS; NS	NA	NA	NS	2 Note 9	
		identification	species	A	Visual observation from vessel	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
54-0011	WW	# seen/location	presence,relative /general/season	2	NS	NA	NA	NS	2 Note 9	
		# of calves	calves	2	NS	NA	NA	NS	2 Note 9	Notes 6,11
		# /group	relative, whales /group	6	NS	NA	NA	NS	2 Note 9	Note 3
		# landed	whales/season	2	NS	NA	NA	NS	2 Note 9	Note 6
		identification	species	A	NS	NA	NA	NA	NA	
		total length	feet	4	NS	NA	NA	NS	2 Note 9	Note 11
		flipper length	relative	1	NS	NA	NA	NS	2 Note 9	
		flipper width	relative	1	NS	NA	NA	NS	2 Note 9	
		flipper shape	description	1	NS	NA	NA	NS	2 Note 9	
		overall colour	hues/age	3	NS	NA	NA	NS	2 Note 9	
		genital structure	male, female	2	NS	NA	NA	NS	2 Note 9	
		stomach contents	relative importance by phylum	3	NS	NA	NA	NS	2 Note 9	
		movements	description	2	NS	NA	NA	NS	2 Note 9	
		call	description	1	NS	NA	NA	NS	2 Note 9	
55-0010	BW	# seen/location	whales/general	6	RAS; Otter; NS; NS; NS NS	NA	NA	NS	2	2 contradictory totals given for # of BW seen in 1954
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	
	WW	# seen/location	whales/general	2	RAS; Otter; NS; NS; NS NS	NA	NA	NS	2	
		# /group	whales/group	1	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
55-0011	WW	# seen/location	presence/general	1	NS	NA	NA	NS	2 See Appendix	
		identification	species	A	Field examination NS	NA	NA	NA	NA	
		total length	cm	126	Field examination	NA	NA	NS	2 See Appendix	Note 10
		blubber thickness	NS	NS	NS	NA	NA	NS	2 Note 9	
		# of dentine layers	layers/tooth/whale	39	Tooth cut longitudinally; halves polished, moistened and examined under binocular microscope	NA	NA	NS	2 See Appendix	3 contradictory totals given for pooled (3-year) sample size
		overall colour	hues	39	NS	NA	NA	NS	2 See Appendix	Note 10
		genital structure	male, female	126	NS	NA	NA	NS	2 see Appendix	Note 10
		stomach contents	presence, identified to phylum, class, order	58	NS	NA	NA	NS	2 see Appendix	Note 10
		parasites	NS	NS	NS	NA	NA	NS	2 Note 9	
56-0007	WW	identification	species	A	Field examination NS	NA	NA	NA	NA	
		total length	cm	126	Field examination	NA	NA	NS	2 See Appendix	Note 10
		blubber thickness	NS	NS	NS	NA	NA	NS	2 Note 9	
		# of dentine layers	layers/tooth/whale	39	Tooth cut longitudinally; halves polished, moistened and examined under binocular microscope	NA	NA	NS	2 See Appendix	3 contradictory totals given for pooled (3-year) sample size
		genital structure	male, female	126	NS	NA	NA	NS	2 See Appendix	Note 10
		stomach contents	presence, identified to phylum, class, order	58	NS	NA	NA	NS	2 See Appendix	Note 10
		parasites	NS	NS	NS	NA	NA	NS	2 Note 9	
59-0009	BW	# seen/location	relative/general/ season	1	NS	NA	NA	NS	2 Note 9	

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					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
59-0009 Cont'd		identification	species	A	NS	NA	NA	NA	NA	
		total length	m	1	NS	NA	NA	NS	2 Note 9	Note 11
		meat weight	tons/whale	1	NS	NA	NA	NS	2 Note 9	
		oil weight	tons/whale	2	NS	NA	NA	NS	2 Note 9	Note 3
		total weight	tons	2	NS	NA	NA	NS	2 Note 9	Note 3
	WW	# seen/location	relative/general /season	2	NS	NA	NA	NS	2 Note 9	
		# of calves	calves	1	NS	NA	NA	NS	2 Note 9	
		# landed	whales/area/season	3	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
		bone weight	percent of total weight	1	NS	NA	NA	NS	2 Note 9	Note 6
		oil weight	percent of total weight	1	NS	NA	NA	NS	2 Note 9	Note 6
		total weight	pounds	1	NS	NA	NA	NS	2 Note 9	Note 6
		heading	description	1	NS	NA	NA	NS	2 Note 9	
59-0010	WW	# landed	whales/region/year	2	NS	NA	NA	NS	2	2 reports give 2 different totals
		identification	species	A	NS	NA	NA	NA	NA	
60-0010	WW	# landed	whales/region/year	1	NS	NA	NA	NS	2	
		identification	species	A	Field examination NS	NA	NA	NA	NA	
		total length	cm	126	Field examination	NA	NA	NS	2 See Appendix	Note 10
		blubber thickness	NS	NS	NS	NA	NA	NS	2 Note 9	
		# of dentine layers	NS	NS	NS	NA	NA	NS	2 Note 9	
		genital structure	male, female	126	NS	NA	NA	NS	2 See Appendix 2	Note 10
		stomach contents	presence, identified to order	1	NS	NA	NA	NS		

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
60-0010 Cont'd		parasites	NS	NS	NS	NA	NA	NS	2 Note 9	
61-0014	WW	# seen/location	whales/general or whales/region/year	7	NS	NA	NA	NS	2	
		# landed	whales/area/day	2	Field examination NS	NA	NA	NS	2,4	
		# struck and lost	percent of catch	1	NS	NA	NA	NS	2 Note 9	
		identification	species	A	Field examination NS	NA	NA	NA	NA	
		total length	cm	126	Field examination	NA	NA	NS	2,4	
		blubber thickness	NS	NS	NS	NA	NA	NS	2 Note 9	
		# of dentine layers	layers/tooth/whale	39	Tooth cut longitudinally; halves polished, moistened and examined under binocular microscope	NA	NA	NS	2	Note 10
		genital structure	male, female	126	NS	NA	NA	NS	2 Note 9	Note 10
		milk present	presence	1	NS	NA	NA	NS	2	
		stomach contents	presence, identified to class	58	NS	NA	NA	NS	2	Note 10
		parasites	NS	NS	NS	NA	NA	NS	2 Note 9	
61-0015	WW	# of calves	juveniles/area	2	NS	NA	NA	NS	2	
		# landed	whales/area/season	4	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
		genital structure	male, female	64	NS	NA	NA	NS	2 Note 9	
62-0014	WW	# landed	whales/area/season	3	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
63-0009	WW	# landed	whales/area/season	2	NS	NA	NA	NS	2	
		# lost	whales/area/season	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
64-0009	WW	# landed	whales/area/season	3	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	

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					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
65-0009	WW	# landed	whales/area/season	5	NS	NA	NA	NS	2	2 contradictory totals given for 1 area
		identification	species	A	NS	NA	NA	NA	NA	
66-0011	WW	# seen/location	presence, relative /general/season or relative, whales/ general, 1' lat. & 1' long.	23	Incidental reports Visual observation from ice Depth sounder NS	Photographs taken on 3 days	NA	Range given for 1 sighting: 15-20 whales	2	
		# of calves	young/1' lat. & 1' long./day	5	Visual observation from ice	Photographs	NA	NS	2	
		# landed	whales/season	2	NS	NA	NA	NS	2 Note 9	Note 3
		# dead/location	presence/general	1	NS	NA	NA	NS	2 Note 9	
		identification	species	A	Visual observation from ice Incidental reports Acoustics NS	NA	NA	NA	NA	
		total length	feet	9	Visual observation from ice NS	NA	NA	Ranges given for 2 whales: 14-15 feet	2	Note 3
		body deformity	description	1	Visual observation from ice	NA	NA	NS	2	
		overall colour	hues	4	Visual observation from ice NS	NA	NA	NS	2	
		food	behaviour relative to organism or identified to phylum, family	2	NS	NA	NA	NS	2 Note 9	
		parasites	presence & description	2	Visual observations from ice	Photographs	NA	NS	2	
		dive time	seconds, minutes/ dive	15	Visual observations from ice	NA	NA	NS	2	Note 3

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
66-0011 Cont'd		# blows/surfacing	breaths/surfacing	2	Visual observation from ice	NA	NA	NS	2	
		# surfacings/time	relative, surfacings /minute, period	62	Visual observation from ice	NA	NA	NS	2	
		synchrony among individuals	description	1	Visual observation from ice	NA	NA	NS	2	
		breaking ice with back	description	1	NS	NA	NA	NS	2	
		# calls/whale-hour	relative/3 whales /hour	3	Hydroacoustics with microphone 4" or 6" below surface NS	Audiotapes	NA	NS	2	
66-0012	WW	# landed	whales/area/season	6	NS	NA	NA	NS	2	Contradictory totals given for 1 area
		identification	species	A	NS	NA	NA	NA	NA	
		heading	relative	1	NS	NA	NA	NS	2	
67-0006	WW	# landed	whales/area/day, season or relative/ area	3	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
		blubber thickness	inches	1	NS	NA	NA	NS	2	
		meat weight	pounds of dried meat	1	NS	NA	NA	NS	2	
		muktuk volume	gallons of muktuk & oil/14 whales	1	NS	NA	NS	NS	2	
		oil volume	gallons of muktuk & oil/14 whales	1	NS	NA	NA	NS	2	
67-0007	BW	# seen/location	relative/general/ season	1	NS	NA	NA	NS	2	
		# dead/location	whales/general	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
	KW	# seen/location	presence, whales /general	2	Incidental reports	NA	NA	NS	2	
		identification	species	A	Incidental reports	NA	NA	NA	NA	
	WW	# seen/location	relative, whales/ general	3	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
68-0009	WW	# of calves	immatures	1	Visual observation from vessel	NA	NA	NS	2	
		# landed	whales/region/year	1	NS	NA	NA	NS	2	Regional total given in report much lower than total given in 68-0010
		# dead/location	whales/general	3	NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Field examination NS	NA	NA	NA	NA	
			tag #/whale	10	Tuna-type tags attached using harpoon from boat	NA	NA	NA	NA	
		total length	cm	6	Field examination Visual observation from vessel	NA	NA	NS	1,4	
		flipper length	cm	5	Field examination	NA	NA	NS	2	
		flipper width	cm	5	Field examination	NA	NA	NS	2	
		maximum girth	cm	4	Field examination	NA	NA	NS	2	
		tail width	cm	5	Field examination	NA	NA	NS	2	
		snout-to-blowhole length	cm	5	Field examination	NA	NA	NS	2	
		snout-to-anus length	cm	5	Field examination	NA	NA	NS	2	
		snout-to-genital slit length	cm	5	Field examination	NA	NA	NS	2	
		snout-to-umbilicus length	cm	2	Field examination	NA	NA	NS	2	
		snout-to-flipper length	cm	3	Field examination	NA	NA	NS	2	
		snout-to-eye length	cm	5	Field examination	NA	NA	NS	2	
		snout-to-ear length	cm	2	Field examination	NA	NA	NS	2	
		overall colour	hues	1	Visual observation from vessel	NA	NA	NS	2	
		genital structure	male, female	5	Field exmination	NA	NA	NS	2 Note 9	
		heading	description	1	Visual observation from vessel	NA	NA	NS	2	
68-0010	WW	# landed	whales/area	2	NS	NA	NA	NS	2	Note 11
		identification	species	A	NS	NA	NA	NA	NA	
		meat weight	pounds/25 whales	1	NS	NA	NA	NS	2	
		muktuk volume	gallons/25 whales	1	NS	NA	NA	NS	2	
		oil volume	gallons/25 whales	1	NS	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
69-0017	WW	# seen/location	presence, relative, whales/general	10	RAS; Cessna 180; 823 m; NS; NS RVS; 20 ft. canoe; NS; NS; NS Shore watch	NA	NA	NS	2	
		# landed	whales/boat/day	1	Visual observation from vessel	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Visual observation from vessel Visual observation from shore Field examination	NA	NA	NA	NA	
			tag #/whale	18	NS	NA	NA	NA	NA	
		total length	feet	1	Visual observation from vessel	NA	NA	15-17 feet	1	Note 3
		scar pattern	description	1	Field examination	Photographs	NA	NS	2	
		heading	description	1	Visual observation from vessel	NA	NA	NS	2	
70-0016	WW	# landed	whales/area/season	2	Hunters' interviews	NA	NA	NS	2	
		# struck and lost	percent of total killed	1	NS	NA	NA	NS	2	
		identification	species	A	Hunters' interviews NS	NA	NA	NA	NA	
71-0017	WW	# landed	whales/area/season	3	Hunters' interviews	NA	NA	NS	2	
		identification	species	A	Hunters' interviews	NA	NA	NA	NA	
72-0005	WW	# seen/location	whales/general	3	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		stomach contents	presence of food	7	NS	NA	NA	NS	2 Note 9	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
72-0007	WW	# seen/location	relative, whales /general	15	RAS; Cessna 185; NS; NS; NS RVS; NS; NS; NS; NS NS	NA	NA	Ranges given for 3 sightings: 1500-1800, 1500-2000, and 200-500 whales	2	
		# of calves	presence/area/season or calves/female/ year	2	NS	NA	NA	NS	2 Note 9	
		# /group	relative, whales/ group	3	NS	NA	NA	NS	2	
		# landed	whales/area/season	4	Field examination NS	NA	NA	NS	2	
		# struck and lost	relative to # landed	1	NS	NA	NA	NS	2	
		# struck, killed and lost	percent of struck and lost	1	NS	NA	NA	NS	2	
		# dead/location	whales/general	4	NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Visual observation from vessel Field examination NS	NA	NA	NA	NA	
		total length	feet	1	NS	NA	NA	NS	2	
		total weight	pounds	4	NS	NA	NA	NS	2 Note 9	Note 3
		genital structure	male, female	38	Field examination	NA	NA	NS	2 Note 9	
		fetus present	presence/whale	3	Field examination	NA	NA	NS	2	
		milk present	presence	3	Field examination	NA	NA	NS	2	
		stomach contents	presence of food	14	Field examination	NA	NA	NS	2	
		presence of birds	description	2	NS	NA	NA	NS	2	
		heading	compass points or relative to land or description	5	NS	NA	NA	NS	2	
		orientation to waves/ wind	relative	1	NS	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
72-0015	WW	# landed	whales/area/season	3	Hunters' interviews	NA	NA	NS	2	
		identification	species	A	Hunters' interviews	NA	NA	NA	NA	
72-0016	BW	# seen/location	whales/1' lat. & 1' long.	3	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	2	Visual observation from plane	NA	NA	NS	2	
	WW	# seen/location	relative, whales/ general, 1' lat. & 1' long.	13	RAS; Twin Otter, Bell 205, Single Otter, NS; NS; NS; NS RVS; 22 ft. canoe; NS; NS; NS Hunters' interviews	NA	NA	NS	2	
		# /group	whales/group	1	Visual observation from helicopter	NA	NA	NS	2	
		# landed	whales/camp/day or whales/region/year	4	Field examination NS	NA	NA	NS	2,4	
		# struck and lost	whales	1	Hunters' interviews	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Visual observation from vessel Field examination Hunters' interviews NS	NA	NA	NA	NA	
			tag #/whale	1	NS	NA	NA	NA	NA	
		total length	inches	1	Field examination	NA	NA	NS	4	
		maximum girth	inches	1	Field examination	NA	NA	NS	2	
		genital structure	male, female	2	Field examination	NA	NA	NS	2	
		presence of birds	description	1	Visual observation from plane	NA	NA	NS	Note 9 2	
		heading	compass points	2	Visual observation from plane	NA	NA	NS	2	
73-0017	WW	# seen/location	presence/general	1	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# of calves	presence of newborn	1	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# landed	whales/camp/season	9	Field examination Hunters' interviews	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
73-0017 Cont'd		identification	species	A	Visual observation from plane Field examination Hunters' interviews	NA	NA	NA	NA	
73-0018	BW	# seen/location	whales/general	9	RAS; Bell 205, Bell 206; NS; NS; NS	NA	NA	NS	2	
		# of calves	immature	1	Field examination	NA	NA	NS	2	
		# dead/location	whales/general, 1' lat. & 1' long.	4	RAS; Bell 206; NS; NS; NS	NA	NA	NS	2,4	
		identification	species	A	Visual observation from helicopter Field examination	NA	NA	NA	NA	
		total length	feet	1	Field examination	NA	NA	NS	4	
		flipper length	inches	1	Field examination	NA	NA	NS	2	
		flipper width	inches	1	Field examination	NA	NA	NS	2	
		tail width	inches	1	Field examination	NA	NA	NS	2	
		scar pattern	description	2	Visual observation from helicopter	Photographs	NA	NS	4	
		genital structure	female	1	Field examination	NA	NA	NS	2 Note 9	
	WW	# seen/location	whales/general	22	RAS; Bell 205, Bell 206; NS; NS; NS Incidental reports	NA	NA	NS	2	
		# of calves	calves/general	1	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# /group	whales/group or whales/surface area	6	Visual observation from helicopter	NA	NA	Range given for 1 group: 200-300 whales	1,2	
		# landed	whales/area/period or whales/region /season	3	Hunters' interviews NS	NA	NA	NS	2	
		# dead/location	whales/general	1	Incidental reports	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter Hunters' interviews Incidental reports NS	NA	NA	NA	NA	
		heading	compass points or relative to land	4	Visual observation from helicopter Incidental reports	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
73-0019	WW	# seen/location	whales/general	59 flights	RAS; Cessna 337, Twin Otter, Cessna 185; NS; NS; NS Incidental reports	NA	NA	Ranges given for 5 sightings: 200-400 whales for 4, 200-300 for 1	2	
		# /aerial transect line	whales/line	12 flights	SAS; Cessna 185; NS; NS; NS	NA	NA	NS	2	
		# of calves	young or calves	5	Field examination Hunters' interviews NS	NA	NA	NS	2	
		# /group	whales/group	F	Visual observation from plane	Photographs	NA	NS	2,4	
		# landed	whales/camp/season	12	Hunters' interviews Field examination	NA	NA	NS	2	
		# struck and lost	whales/camp/season	12	Hunters' interviews	NA	NA	NS	2	
		# /distance from aircraft	presence/yards from plane on water	1	Visual observation from plane	NA	NA	NS	2	
		# /distance from vessel	presence/distance on map or whales/ relative	11	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Field examination Hunters' interviews Incidental reports NS	NA	NA	NA	NA	
		genital structure	male, female or percent of total landed that were female	NS	Field examination	NA	NA	NS	2 Note 9	
		stomach contents	presence, identified to phylum, order	13	Field examination Hunters' interviews	NA	NA	NS	2	
		heading	compass points or relative to land or description	F	Visual observation from plane Incidental reports	NA	NA	NS	2	
		swimming under ice	description	1	Visual observation from plane	NA	NA	NS	2	
		orientation to others	relative	2	Visual observation from plane	Photographs	NA	NS	2,4	

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					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
73-0019 Cont'd		orientation to waves/ wind	relative	1	Visual observation from plane	Photograph	NA	NS	4	
		position in water	description	1	NS	NA	NA	NS	2	
73-0020	WW	# seen/location	relative/general	1	NS	NA	NA	NS	2	
		# landed	whales/camp/season	3	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
		muktuk weight	pounds/whale	1	NS	NA	NA	NS	2 Note 9	
		meat weight	pounds/whale	1	NS	NA	NA	NS	2 Note 9	
73-0021	BW	# seen/location	whales/general	3-4	Shore watch	NA	NA	NS	1,2 Note 12	Note 1
		identification	species	A	Visual observation from shore	NA	NA	NA	NA	
73-0022	HP	# seen/location	whales/approx. 1' lat. & 1' long.	1	Hunters' interviews	NA	NA	NS	2	
		# landed	whales	1	Hunters' interviews	NA	NA	NS	2	
		identification	species	A	Hunters' interviews Lab examination	NA	NA	NA	NA	
		skull length	mm	1	Lab examination	NA	NA	NS	2	
		mandible length	mm	1	Lab examination	NA	NA	NS	2	
		mandible height	mm	1	Lab examination	NA	NA	NS	2	
		length symphysis mandibles	mm	1	Lab examination	NA	NA	NS	2	
		rostrum length	mm	1	Lab examination	NA	NA	NS	2	
		rostrum width	mm/location	1	Lab examination	NA	NA	NS	2	
		breadth across supra-orbital processes	mm	1	Lab examination	NA	NA	NS	2	
		zygomatic width	mm	1	Lab examination	NA	NA	NS	2	
		braincase width	mm	1	Lab examination	NA	NA	NS	2	
		premaxillae width	mm	1	Lab examination	NA	NA	NS	2	
		temporal fossa length	mm	1	Lab examination	NA	NA	NS	2	
		temporal fossa height	mm	1	Lab examination	NA	NA	NS	2	
		tip rostrum to nares	mm	1	Lab examination	NA	NA	NS	2	
		length toothrow	mm/jaw/side	1	Lab examination	NA	NA	NS	2	
		tip rostrum to pterygoid	mm	1	Lab examination	NA	NA	NS	2	
		synchrony among animals	description	1	Hunters' interviews	NA	NA	NS	2	
		porpoising	description	1	Hunters' interviews	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
73-0025	BW	# seen/location	whales/1' lat. & 1' long.	1	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter	NA	NA	NA	NA	
	WW	# seen/location	whales/general, 1' lat. & 1' long.	6	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter	NA	NA	NA	NA	
		heading	compass points	2	Visual observation from helicopter	NA	NA	NS	2	
74-0028	WW	# landed	whales/camp/season	7	Hunters' interviews Field examination	NA	NA	NS	2	
		identification	species	A	Hunters' interviews Field examination	NA	NA	NA	NA	
		stomach contents	presence, identified to order	5	Field examination Hunters' interviews	NA	NA	NS	2	
		parasites	presence, identified to species	2	Field examination	NA	NA	NS	2	
74-0029	BW	# /aerial transect line	whales/line	58 lines	SAS; Cessna 337; 91-152m; 222-259 km/h; 1.6 km	NA	NA	NS	3	Note 13
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	4	Visual observation from plane	NA	NA	NS	2	
	WW	# seen/location	whales/general	1	SAS; Cessna 337; 91-152m; 222-259 km/h; 1.6 km	NA	NA	NS	2	
		# /aerial transect line	whales/line	58 lines	SAS; Cessna 337; 91-152m; 222-259 km/h; 1.6 km	NA	NA	NS	3	Note 13
		# /group	whales/group	5	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	24	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
74-0030	BW	# seen/location	whales/general, 1' lat. & 1' long.	6	RAS; Cessna 337, Bell 205; NS; NS; NS Incidental reports	Photographs in one spot	NA	NA	2	
		# of calves	calves	1	RAS; Cessna 337; NS; NS; NS	NA	NA	NS	2	
		# dead/location	vertebrae, skull, ribs, jaw, whales/ general, 1' lat. & 1' long.	7	RAS; Bell 205, Bell 206; NS; NS; NS	NA	NA	NS	2,4	
		identification	species	A	Visual observation from plane Visual observation from helicopter Field examination Incidental reports	NA	NA	NA	NA	
			tag #	1	12 ga. Discovery Mark tag with 7 foot dacron streamer	NA	NA	NA	NA	
		total length	inches, feet	2	Field examination Visual observation from helicopter	NA	NA	NS	1,4 Note 14	
		flipper length	inches	1	Field examination	NA	NA	NS	2	
		flipper width	inches	1	Field examination	NA	NA	NS	2	
		tail width	feet	1	Field examination	NA	NA	NS	2	
		baleen length	inches	1	Field examination	NA	NA	NS	2	
		overall colour	hues, description	2	Visual observation from helicopter	NA	NA	NS	2	
		genital structure	male	1	Field examination	NA	NA	NS	2 Note 9	
		heading	compass points	1	Visual observation from helicopter	NA	NA	NS	2	
		position in water	description	1	Visual observation from helicopter	NA	NA	NS	2	
		dive characteristics	description	1	Visual observation from helicopter	NA	NA	NS	2	
	WW	# seen/location	relative, whales/ general	36	RAS; Cessna 337, Twin Otter, Bell 205, Bell 206; NS; NS; NS Incidental reports	NA	NA	Range given for 1 sighting: 300-400 whales	2	
		# of calves	immatures or juveniles	2	RAS; Bell 206; NS; NS; NS Incidental reports	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
74-0030 Cont'd		# /group	relative/group	1	Visual observation from plane	NA	NA	NS	2	
		# landed	whales/camp/period	2	Hunters' interviews NS	NA	NA	NS	2	
		# struck and lost	whales/camp/period	1	Hunters' interviews	NA	NA	NS	2	
		# dead/location	whales/general	5	RAS; NS; NS; NS; NS Incidental reports	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Visual observation from helicopter Hunters' interviews Incidental reports NS	NA	NA	NA	NA	
74-0031	BW	# seen/location	whales/1' lat. & 1' long.	10	RAS; Cessna 337; 45 m; 160 km/h; 0.4 km	NA	NA	NS	1,2,3 Note 5	Notes 1,15
		# /aerial transect line	whales/8 km segment/line	120 lines	SAS; Cessna 337; 45 m; 160 km/h; 0.4 km	NA	NA	NS	1 Note 5	Notes 1,15
		identification	dark whales or species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# seen/location	whales/1' lat. & 1' long.	3	RAS; Cessna 337; 45 m; 160 km/h; 0.4 km	NA	NA	NS	2,3	Note 1
		# /aerial transect line	whales/8 km segment/line	120 lines	SAS; Cessna 337; 45 m; 160 km/h; 0.4 km	NA	NA	NS	2,3	Notes 1,15
		# of calves	calves, young/8 km segment/line	120 lines	SAS; Cessna 337; 45 m; 160 km/h; 0.4 km	NA	NA	NS	2	Note 1
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
74-0032	BW	# seen/location	whales/general	1	NS	NA	NA	NS	2	Note 1
		# /aerial transect line	whales/line	445 lines	SAS; Cessna 337, Cessna 185; 183 m; NS; 1.6 km	NA	NA	NS	2,3	Note 1
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	
	WW	# seen/location	whales/general	1	NS	NA	NA	NS	2	Note 1
		identification	species	A	NS	NA	NA	NA	NA	
		heading	compass points	1	NS	NA	NA	NS	2	Note 1

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
74-0033	WW	# seen/location	presence, relative, whales/general	18	RAS; Cessna 337; 304-609 m; NS; NS	NA	NA	NS	2	
		# /aerial transect line	NS	NS	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	1,2 Note 8	Note 13
		# of calves	juveniles, newborns calves/general location	3	RAS; Cessna 337; 304-609 m; NS; NS SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /group	whales/group	2	Visual observation from plane Incidental reports	NA	NA	NS	2	
		# landed	whales/camp/day, period	14	Hunters' interviews	NA	NA	NS	2	
		# struck and lost	percent	1	Hunters' interviews NS	NA	NA	NS	2	
		# dead/location	whales/general	4	NS	NA	NA	NS	2	
		# /distance from vessel	presence/yards	1	NS	Photographs	NA	NS	2	
		identification	species	A	Visual observation from plane Incidental reports Hunters' interviews Field examination NS	NA	NA	NA	NA	
		total length	0.1 feet	26	Field examination	NA	NA	NS	2,4 See Appendix	
		# of dentine layers	layers/3 teeth/lower jaw	22	Teeth sectioned longitudinally	NA	NA	NS	2	
		genital structure	male, female	26	Field examination	NA	NA	NS	2 Note 9	
		ovary length	mm	3	Visual examination of photograph	Photographs	NA	NS	2	
		ovary width	mm	3	Visual examination of photograph	Photographs	NA	NS	2	
		corpora lutea #	# /ovary	2	Visual examination of photograph	Photographs	NA	NS	1	
		placenta present	presence	10	Field examination	NA	NA	NS	2	
		fetus present	presence	10	Field examination	NA	NA	NS	2	
		fetus length	inches	1	Visual examination of photograph	Photographs	NA	NS	2	
		milk present	presence	10	Field examination	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
74-0033 Cont'd		stomach contents	presence, identified to order, species	NS	Field examination	NA	NA	NS	2	
		parasites	presence, identified to phylum	NS	Field examination	NA	NA	NS	2	
		heading	compass points or relative to land	4	Visual observation from plane	NA	NA	NS	2	
74-0035	WW	# seen/location	relative/general	2	NS	NA	NA	NS	2	
		# landed	whales/camp/day, period, season	13	Field examination Hunters' interviews	NA	NA	NS	2	Contradictory totals given for 1 time period and for season
		identification	species	A	Field examination Hunters' interviews NS	NA	NA	NA	NA	
		meat weight	pounds or pounds/ whale	2	NS	NA	NA	NS	2	Note 6
		muktuk volume	pails	1	NS	NA	NA	NS	2	
		muktuk weight	pounds	1	NS	NA	NA	NS	2	
74-0053	WW	# seen/location	whales/general	3	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter	NA	NA	NA	NA	
		heading	compass points	1	Visual observation from helicopter	NA	NA	NS	2	
75-0044	WW	# landed	whales/area/season	3	Field examination Hunters' interviews	NA	NA	Ranges given for 2 totals: 45-50, 56-63 whales	2	
		identification	species	A	Field examination Hunters' interviews	NA	NA	NA	NA	
75-0045	BW	# /aerial transect line	whales/line	61 lines	SAS; Cessna 337; 91-152 m; 260-316 km/h; 0.8 km	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# /aerial transect line	whales/line	61 lines	SAS; Cessna 337; 91-152 m; 260-316 km/h; 0.8 km	NA	NA	NS	3	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
75-0045 Cont'd		# of calves	young, young-of-year /line	61 lines	SAS; Cessna 337; 91-152 m; 260-316 km/h; 0.8 km	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
75-0046	WW	# seen/location	whales/general	1	RAS; Twin Otter; 152-457m; 222 km/h; NS	NA	NA	NS	2,3	
		# /aerial transect line	whales/line	44 lines	SAS; Twin Otter; 305-457m; 222 km/h; 1.6 km	NA	NA	NS	1,2,3 Note 8	Note 13
		# /group	whales/group	18	Visual observation from plane	NA	NA	NS	2	
		# /distance from vessel	relative, whales/ miles	2	SAS; Twin Otter; 305-457m; 222 km/h; 1.6 km NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	
75-0047	BW	# seen/location	whales/general, 1' lat. & 1' long.	23	RAS; Twin Otter, Bell 206; NS; NS; NS Incidental reports	Photographs	NA	NS	1,2 Note 2	
		# /group	whales/group	14	Incidental reports	NA	NA	Range given for 1 sighting: 10-15 whales	1,2 Note 2	
		# dead/location	mandible, skull, ribs, vertebrae, whales/1' lat. & 1' long.	5	RAS; Bell 205; NS; NS; NS	NA	NA	NS	2	
		# /distance from aircraft	whales/feet	2	Incidental reports	NA	NA	NS	1,2 Note 2	
		identification	species	A	Visual observation from plane Visual observation from helicopter Incidental reports	NA	NA	NA	NA	
		total length	feet	4	Incidental reports	NA	NA	Range given for 1 whale: 25-35 feet	2	
		overall colour	hues	1	Incidental reports	NA	NA	NS	2	
		metal present	presence	1	Commander Valve Locator	NA	NA	NS	1 Note 14	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
75-0047 Cont'd		heading	compass points	12	Visual observation from helicopter Incidental reports	NA	NA	NS	2	
		breaching	description	1	Incidental reports	NA	NA	NS	2	
	WW	# seen/location	whales/general, 1' lat. & 1' long.	49	RAS; Twin Otter, Bell 205, Bell 206; NS; NS; NS Incidental reports	NA	NA	Ranges given for several sightings: 20-30, 50-100, 300-400, 1000-1500 whales	1,2 Note 2	
		# of calves	calves	3	Incidental reports	NA	NA	NS	1,2 Note 2	
		# /group	whales/group	19	Incidental reports	NA	NA	Ranges given for several sightings: 12-15,20-25, 20-30,25-30, 30-50,40-50 whales	1,2 Note 2	
		# landed	whales/general area/ day	1	Incidental reports	NA	NA	NS	2	
		# dead/location	whales/general	2	RAS; Bell 205; NS; NS; NS Incidental reports	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Visual observation from helicopter Incidental reports	NA	NA	NA	NA	
		total length	inches or feet	2	Incidental reports	NA	NA	Range given for 1 whale: 10-18 feet	2	
		overall colour	hues	7	Incidental reports	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
75-0047 Cont'd		genital structure	male	1	Incidental reports	NA	NA	NS	2 Note 9	
		presence of birds	description	1	Incidental reports	NA	NA	NS	2	
		heading	compass points	15	Incidental reports	NA	NA	NS	2	
		distance/time	miles/hour	1	Incidental reports	NA	NA	NS	2	
		tail slapping	description	1	Incidental reports	NA	NA	NS	4	
75-0048	BW	# seen/location	whales/segment	1	RAS; Twin Otter; 24-122 m; 145-258 km/h; 402 m	NA	NA	NS	2	
		# /group	whales/group	1	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# seen/location	whales/segment	10	RAS; Twin Otter; 24-122 m; 145-258 km/h; 402 m	NA	NA	NS	2	
		# /group	whales/group	14	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
75-0050	BW	# seen/location	whales/elapsed time	1	RAS; Cessna 337; 304 m; 242-258 km/h; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
75-0050 Cont'd	WW	# seen/location	whales/general or whales/elapsed time	138	RAS; Cessna 337, Cessna 185; 91-304 m; 193-258 km/h; NS Incidental reports	Photographs	NA	Range given for 1 sighting: 30-40 whales	2	
		# /aerial transect line	whales/line	203 lines	SAS; Cessna 185; 152-304m; 193 km/h; 1.6 km	NA	NA	NS	3	Note 15
		# of calves	calves or yearlings	14	RAS; Cessna 185; 304 m; 193 km/h; NS SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /group	whales/group	1	Visual observations from plane	NA	NA	NS	2	
		# landed	whales/area/day, period	22	Hunters' interviews Visual observations from plane	NA	NA	NS	2	
		# struck and lost	whales/area/period	1	Hunters' interviews	NA	NA	NS	2	
		# dead/location	whales/general	10	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km Incidental reports	NA	NA	NS	2	
		# /distance from land	whales/miles	3	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Incidental reports Hunters' interviews Field examination NS	NA	NA	NA	NA	
		total length	inches	17	Field examination Hunters' interviews NS	NA	NA	NS	1,2 Note 18	
		# of dentine layers	NS	14	NS	NA	NA	NS	2 Note 9	
		overall colour	hues	2	Visual observation from plane	NA	NA	NS	2	
		genital structure	male or female	17	Field examination Hunters' interviews NS	NA	NA	NS	2 Note 9	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
75-0050 Cont'd		corpora lutea #	presence	1	Field examination	NA	NA	NS	2	
		milk present	presence	3	Field examination Hunters' interviews	NA	NA	NS	2	
		stomach contents	presence, identified to order	1	Field examination	NA	NA	NS	2	
		heading	compass points or relative to land or relative to plane's path	155	Visual observation from plane	NA	NA	NS	1,2 Note 17	
		orientation to waves/ wind	description	15	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	2	Visual observation from plane	NA	NA	NS	2	
75-0071	WW	# seen/location	whales/general	1	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter	NA	NA	NA	NA	
76-0028	BW	# seen/location	whales/general	1	RAS; Cessna 337; 91-152 m; 250-338 km/h; 0.8 km	NA	NA	NS	2	
		# /aerial transect line	whales/line	63 lines	SAS; Cessna 337; 91-152 m; 250-338 km/h; 0.8 km	NA	NA	NS	3	Note 13
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# /aerial transect line	whales/line	63 lines	SAS; Cessna 337; 91-152 m; 250-338 km/h; 0.8 km	NA	NA	NS	3	
		# of calves	young	2	SAS; Cessna 337; 91-152 m; 250-338 km/h; 0.8 km	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
76-0029	BW	# seen/location	whales/general	7	RAS; Bell 206; NS; NS; NS Incidental reports	Photographs	NA	NS	1,2 Note 2	
		# /group	whales/group	6	Incidental reports	NA	NA	NS	1,2 Note 2	
		# dead/location	whales/general	1	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		# /distance from vessel	whales/yards	2	Incidental reports	NA	NA	NS	1 Note 2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
76-0029 Cont'd		identification	species	A	Visual observation from helicopter Incidental reports Field examination	NA	NA	NA	NA	
		tail width	feet	1	Incidental reports	NA	NA	Range given: 8-10, maybe 15 feet	1 Note 14	
		mandible length	feet	1	Field examination	NA	NA	NS	2	
		overall colour	hues	1	Incidental reports	NA	NA	NS	2	
		heading	compass points	7	Visual observation from helicopter Incidental reports	NA	NA	NS	2	
		position in water	description	2	Incidental reports	NA	NA	NS	2	
	WW	# seen/location	relative, whales/ general, 1' lat. & 1' long.	21	RAS; Bell 206; NS; NS; NS Incidental reports	NA	NA	Range given for 1 sighting: 300-400 whales	1,2 Note 2	
		# of calves	calves	1	Incidental reports	NA	NA	NS	1 Note 2	
		# /group	relative, whales/ herd, pod	5	Visual observation from helicopter Incidental reports	NA	NA	NS	1,2 Note 2	
		# dead/location	whales/general	1	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		# /distance from vessel	relative/miles	2	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter Incidental reports	NA	NA	NA	NA	
		heading	compass points	3	Visual observation from helicopter Incidental reports	NA	NA	NS	2	
76-0030	BW	# /aerial transect line	whales/general location or whales/ line	439 lines	SAS; Cessna 185; 152 m; 193 km/h; 1.6-2.4 km	NA	NA	NS	2,3	Note 1
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
76-0031	WW	# seen/location	presence, whales/ general	2	Shore watch RVS; 18 ft. Lund; NS; O-NS; NS	NA	NA	NS	2	
		# /distance from vessel	presence, whales/ relative, miles, m	7	RVS; 18 ft. Lund; NS; O-NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from shore Visual observation from vessel Hydroacoustics	NA	NA	NA	NA	
		presence of birds	description	1	Visual observation from shore	NA	NA	NS	2	
		heading	relative to shore	1	Visual observation from shore	NA	NA	NS	2	
		position in water	description & diagram	1	Visual observation from vessel	NA	NA	NS	4	
		splashing	relative frequency	1	Visual observation from vessel	NA	NA	NS	2	
		spy-hopping	relative frequency	1	Visual observation from vessel	NA	NA	NS	2	
		# calls/type/time	calls/description/ second	NS	Hewlett-Packard Model 3960 & Ithaco 451 pre-amplifier & 4113 variable filter & Celesco BC-10 hydrophone from motionless boat	Audiotapes	Honeywell SAI-51B real time spectrum analyzer	NS	1,3 Note 8	
		call frequency spectrum	kHz, Hz/description	NS	Hewlett-Packard Model 3960 & Ithaco 451 pre-amplifier & 4113 variable filter & Celesco BC-10 hydrophone from motionless boat	Audiotapes	Honeywell SAI-51B real time spectrum analyzer	NS	2,4	
76-0032	WW	# seen/location	whales/general	3	Incidental reports	NA	NA	NS	1 Notes 2,5	
		# /group	whales/2 schools	1	Incidental reports	NA	NA	NS	1 Note 2	
		identification	species	F	Incidental reports	NA	NA	NA	NA	
76-0033	N	# dead/location	tusk & cranium/ 1' lat. & 1' long.	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
76-0033 Cont'd		tusk length	cm	1	NS	NA	NA	NS	2	
		skull length	cm	1	NS	NA	NA	NS	2	
		maxilla length	cm	1	NS	NA	NA	NS	2	
76-0034	BW	# seen/location	whales/general	3	RAS; Cessna 185; 304 m; NS; NS Incidental reports	NA	NA	Range given for 1 sighting: 20-30 whales	2	
		# /aerial transect line	whales/line	192 lines	SAS; Cessna 185; 152-304m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# /distance from vessel	whales/miles	1	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		identification	species	4	Visual observation from plane Incidental reports	NA	NA	NA	NA	
		heading	compass points or relative to land	6	Visual observation from plane	NA	NA	NS	1,2 Note 17	
	WW	# seen/location	relative, whales/ general or whales/ elapsed time	76	RAS; Cessna 185; 304 m; NS; NS Hunters' interviews Incidental reports	NA	NA	Ranges given for several sightings: 10-15, 30-40, 30-50, 100-150, 200-300 whales	2	
		# /aerial transect line	whales/line	192 lines	SAS; Cessna 185; 152-304m; 193 km/h; 1.6 km	NA	NA	NS	3	
		# of calves	calves	10	RAS; Cessna 185; 304 m; NS; NS SAS; Cessna 185; 152-304m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# landed	whales/camp, hunter/ day, period	18	Visual observation from plane Hunters' interviews Incidental reports	NA	NA	NS	2,4	
		# dead/location	whales/15 sec. intervals	5	SAS; Cessna 185; 152-304m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /distance from vessel	whales/15 sec. intervals & vessel/ 15 sec. intervals or presence, whales/ miles	4	SAS; Cessna 185; 152-304m; 193 km/h; 1.6 km Incidental reports	NA	NA	NS	2 See Appendix	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
76-0034 Cont'd		# /distance from land	whales/yards	1	RAS; Cessna 185; 304 m; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Hunters' interviews Incidental reports Field examination	NA	NA	NA	NA	
		total length	feet	1	Hunters' interviews	NA	NA	NS	1 Note 14	
		genital structure	male or female	1	Hunters' interviews	NA	NA	NS	2 Note 9	
		placenta present	presence	1	Hunters' interviews	NA	NA	NS	2	
		milk present	presence	1	Hunters' interviews	NA	NA	NS	2	
		stomach contents	presence, identified to species	1	Field examination	Photographs	NA	NS	2	
		presence of birds	description	4	Hunters' interviews Visual observation from plane	NA	NA	NS	2	
		heading	compass points or relative to land	211	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		distance/time	relative	2	Visual observation from plane	NA	NA	NS	1 Note 4	
		orientation to vessel	description & diagram	6	Visual observation from plane	NA	NA	NS	2,4	
		orientation to ice	description	1	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	1	Visual observation from plane	NA	NA	NS	2	
76-0035	WW	# landed	whales/camp/day	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
		total length	0.1 feet	23	NS	NA	NA	NS	2	
		genital structure	male or female	23	NS	NA	NA	NS	2 Note 9	
77-0001	BW	# /aerial transect line	whales/line	417 lines	SAS; Cessna 185; 213-366 m; 192 km/h; 1.6 km	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
77-0001 Cont'd		heading	compass points	3	Visual observation from plane	NA	NA	NS	1 Note 17	
	WW	# seen/location	whales/general	3	RAS; Cessna 185; 304 m; 193 km/h; NS Hunters' interviews	NA	NA	Range given for 1 sighting: 100-150 whales	2	
		# /aerial transect line	whales/line	417 lines	SAS; Cessna 185; 213-366 m; 192 km/h; 1.6 km	NA	NA	NS	3	
		# of calves	young or calves or juveniles or yearlings	176	SAS; Cessna 185; 213-366 m; 192 km/h; 1.6 km	NA	NA	NS	2	
		# /group	whales/group	8	Visual observation from plane	NA	NA	NS	2	
		# dead/location	whales/general	2	SAS; Cessna 185; 213-366 m; 192 km/h; 1.6 km	NA	NA	NS	2	
		# /distance from vessel	whales/miles	4	SAS; Cessna 185; 304 m; 192 km/h; 1.6 km NS	NA	NA	Range given for 3 sightings: 15-30 whales	2	
		identification	species	A	Visual observation from plane Hunters' interviews NS	NA	NA	NA	NA	
		presence of birds	description	24	Visual observation from plane Hunters' interviews	NA	NA	NS	2,4	
		heading	compass points or relative to land	593	Visual observation from plane	NA	NA	NS	1,2 Note 17	
		distance/time	relative	6	Visual observation from plane	NA	NA	NS	2	
		orientation to others	description or diagram	3	Visual observation from plane	NA	NA	NS	2,4	
		orientation to vessel	description or diagram	3	NS	NA	NA	NS	2	
		orientation to waves/ wind	description	6	Visual observation from plane	NA	NA	NS	2	
		position in water	description	77	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	14	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
77-0001 Cont'd		gamming	presence or whales/ gam or diagram	3	Visual observation from plane	NA	NA	NS	2,4	
		spy-hopping	whales or presence	4	Visual observation from plane	NA	NA	NS	2	
		swimming in circles	description	2	Visual observation from plane	NA	NA	NS	2	
		rolling on side	description	1	Visual observation from plane	NA	NA	NS	2	
77-0036	BW	# /aerial transect line	whales/line	63 lines	SAS; Cessna 337; 91-152 m; 242-322 km/h; 0.8 km	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	1	Visual observation from plane	NA	NA	NS	2	
	WW	# /aerial transect line	whales/line	63 lines	SAS; Cessna 337; 91-152 m; 242-322 km/h; 0.8 km	NA	NA	NS	3	
		# of calves	size relative to adult or grey	4	SAS; Cessna 337; 91-152 m; 242-322 km/h; 0.8 km	NA	NA	NS	1,3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	12	Visual observation from plane	NA	NA	NS	2	
77-0037	BW	# seen/location	whales/general, 1' lat. & 1' long.	27	Incidental reports	NA	NA	Ranges given for several sightings: 4-5, 5-10, 8-10, 8-12, 15-20, & 30-40 whales	1,2 Notes 2,5	
		# /aerial transect line	whales/line	154 lines	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# of calves	calves	3	Incidental reports	NA	NA	NS	1 Note 2	
		# /group	whales/pod	3	Incidental reports	NA	NA	Range given for 1 sighting: 8-12 whales	1 Note 2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
77-0037 Cont'd		# /distance from vessel	whales/miles, feet	4	Incidental reports	NA	NA	NS	1 Note 2	
		identification	species or colour	A	Visual observation from plane Incidental reports	NA	NA	NA	NA	
		total length	feet	1	Incidental reports	NA	NA	NS	1 Note 14	
		tail width	feet	1	Incidental reports	NA	NA	NS	1 Note 14	
		overall colour	hues	2	Incidental reports	NA	NA	NS	2	
		distance/time	relative	1	Incidental reports	NA	NA	NS	2	
		heading	compass points	19	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		surface time	minutes, seconds/ surfacing	3	Incidental reports	NA	NA	NS	2	
		# surfacings/time	surfacings/minute	1	Incidental reports	NA	NA	NS	2	Note 6
		# blows/surfacing	blows/surfacing	1	Incidental reports	NA	NA	NS	2	
		distance between individuals	relative	1	Incidental reports	NA	NA	NS	2	
		position in water	description	2	Incidental reports	NA	NA	NS	2	
		dive characteristics	description	1	Incidental reports	NA	NA	NS	2	
	WW	# seen/location	relative, whales/ general, 1' lat. & 1' long. or whales/ elapsed time	114	RAS; Cessna 185; 304 m; 193 km/h; NS Incidental reports	NA	NA	Ranges given for several sightings: 8-10, 20-30, 40-50, 50-100, 100-200 whales	1,2 Note 2	
		# /aerial transect line	whales/line	154 lines	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# of calves	calves or calf of the year or size relative to adult or 3-year olds or juveniles or yearlings or newborn	33	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km Incidental reports	NA	NA	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
77-0037 Cont'd		# /group	whales/group	5	Visual observation from plane	Photographs	NA	Range given for 1 sighting: 5-10 whales	2	
		# landed	whales/camp, hunter/ day, period	34	Hunters' interviews Incidental reports NS	NA	NA	NS	2,4	
		# struck and lost	whales/location or whales/hunter	23	Visual observation from plane Hunters' interviews NS	NA	NA	NS	2	
		# dead/location	whales/line or whales/general	10	SAS; Cessna 185; 304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /distance from vessel	whales/relative	5	RAS; Cessna 185; 304 m; 193 km/h; NS Incidental reports	NA	NA	Range given for 1 sighting: 20-30 whales	1,2 Note 2 See Appendix	
		identification	species	A	Visual observation from plane Incidental reports Hunters' interviews Field examination NS	NA	NA	NA	NA	
		total length	feet or 0.1 feet or inches	13	Hunters' interviews Field examination	NA	NA	NS	2,4	
		flipper length	inches or 0.1 feet	9	Hunters' interviews Field examination	NA	NA	NS	2	
		flipper width	inches or 0.1 feet	9	Hunters' interviews Field examination	NA	NA	NS	2	
		tail width	inches or 0.05 feet	9	Hunters' interviews Field examination	NA	NA	NS	2,4	
		maximum girth	inches or 0.1, 0.05 feet	9	Hunters' interviews Field examination	NA	NA	NS	1,2 Note 18	
		girth behind flippers	inches or 0.1 feet	9	Hunters' interviews Field examination	NA	NA	NS	2	
		# teeth/jaw	teeth/half jaw	6	Hunters' interviews Field examination	NA	NA	NS	2	
		blubber thickness	inches or 0.01 feet	6	Hunters' interviews Field examination	NA	NA	NS	2	
		overall colour	hues	2	Field examination	NA	NA	NS	2	
		scar pattern	description	2	Field examination	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
77-0037 Cont'd		genital structure	male or female	20	Hunters' interviews Field examination Incidental reports	NA	NA	NS	2 Note 9	
		milk present	presence	1	Hunters' interviews	NA	NA	NS	2	
		stomach contents	presence, identified to species	1	Incidental reports	NA	NA	NS	2	
		presence of birds	description	9	Visual observation from plane Incidental reports	NA	NA	NS	2	
		heading	compass points or relative to land	229	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		distance/time	relative	1	Visual observation from plane	NA	NA	NS	2	
		# surfacings/time	surfacings/second	1	Incidental reports	NA	NA	NS	2	
		orientation to vessel	description	3	Visual observation from plane Incidental reports	NA	NA	NS	2	
		position in water	description	2	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	3	Visual observation from plane	Photographs	NA	NS	2	
		gamming	presence	1	Visual observation from plane	NA	NA	NS	2	
77-0038	WW	# seen/location	whales/1' lat. & 1' long.	52	RAS; Twin Otter, Aerostar; 610-762 m; 258-290 km/h; 0.8-1.6 km	Photographs	NA	Ranges given for 2 sightings: 15-20, 25-30 whales	2,3	
		# /group	whales/group	90	Visual observation from plane	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	degrees true or compass points	38	Visual observation from plane	NA	NA	NS	1,2 Note 17	
		distance/time	relative	1	Visual observation from plane	NA	NA	NS	2	
		swimming under ice	description or whales/nautical mile	2	Visual observation from plane	NA	NA	NS	2	
		dive time	seconds/dive	7	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
77-0040	WW	# landed	whales/area, hunters /period, season	26	Hunters' interviews Field examination	NA	NA	NS	2,4	
		identification	species	A	Hunters' interviews Field examination	NA	NA	NA	NA	
		total length	inches or 0.1 feet	2	Field examination	NA	NA	NS	4	
		maximum girth	0.1 feet or 0.5 inches	2	Field examination	NA	NA	NS	1 Note 18	
		# teeth/jaw	teeth/half jaw	1	Field examination	NA	NA	NS	2	
		blubber thickness	0.5 inches	1	Field examination	NA	NA	NS	2	
		genital structure	male or female	2	Field examination	NA	NA	NS	2 Note 9	
77-0070	BW	# seen/location	whales/general	3	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter	NA	NA	NA	NA	
		heading	compass points	1	Visual observation from helicopter	NA	NA	NS	2	
	WW	# seen/location	whales/general	1	RAS; helicopter; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from helicopter	NA	NA	NA	NA	
		heading	compass points	1	Visual observation from helicopter	NA	NA	NS	2	
78-0008	BW	# seen/location	whales/general, nautical miles & bearing from beacon, 1' lat. & 1' long.	7	Incidental reports RAS; Cessna 337, Cessna 185; 304 m; 193 km/h; NS	NA	NA	Ranges given for 2 sightings: 4-6 and 16-18 whales	1,2 Note 2	
		# /aerial transect line	whales/line	300 lines	SAS; Cessna 185, Twin Otter; 152-610 m; 193-258 km/h; 1.6 km	NA	NA	NS	3	
		# /distance from vessel	whales/miles, feet	5	Incidental reports	NA	NA	NS	1 Note 2	
		identification	species	A	Incidental reports Visual observation from plane	NA	NA	NA	NA	
		heading	compass points or degrees true	8	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		distance between individuals	relative	1	Incidental reports	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
78-0008 Cont'd	WW	# seen/location	relative, whales/ elapsed time, general	292	RAS; Cessna 337, Cessna 185; 304 m; 193 km/h; NS Incidental reports Hunters' interviews	NA	NA	Ranges given for several sightings: 8-10, 10-12, 20-30, 35-40, 40-50, 100-150 whales	1,2 Note 2	
		# /aerial transect line	whales/line	300 lines	SAS; Cessna 185, Twin Otter; 152-610 m; 193-258 km/h; 1.6 km	NA	NA	NS	3	
		# of calves	newborn or young of year or young or size relative to adult or 3-year olds	61	RAS; Cessna 337, Cessna 185; 304 m; 193 km/h; NS SAS; Cessna 185, Twin Otter; 152-610 m; 193-258 km/h; 1.6 km Incidental reports Hunters' interviews	NA	NA	NS	1,2,3 Note 2	
		# /group	relative, whales/ group	30	Visual observation from plane Incidental reports	NA	NA	Ranges given for 4 sightings: 2-5, 3-7, 6-7, and 50-60 whales	1,2 Note 2	
		# landed	whales/hunters/day, period	78	Hunters' interviews Incidental reports Visual observation from plane	NA	NA	NS	2,4	
		# struck and lost	whales/hunters/day, period	17	Hunters' interviews	NA	NA	NS	2,4	
		# dead/location	whales/general or whales/line	16	SAS; Cessna 185; 152-304 m; 193 km/h; 1.6 km RAS; Cessna 185; 304 m; 193 km/h; NS Incidental reports	NA	NA	NS	2	
		# /distance from aircraft	whales/degrees from horizontal	45	SAS; Cessna 185; 152-304 m; 193 km/h; 1.6 km & inclinometer readings	NA	NA	NS	3	
		# /distance from vessel	whales/miles, km, yards, m, feet, diagram for some	15	RAS; Cessna 337, Cessna 185; 304 m; 193 km/h; NS Incidental reports	NA	NA	Range given for 1 distance: 200-300 feet	1,2 Note 2 See Appendix	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
78-0008 Cont'd		# /distance from land	whales/yards	1	Incidental reports	NA	NA	NS	1 Note 2	
		identification	species	A	Visual observation from plane Hunters' interviews Incidental reports Field examination	NA	NA	NA	NA	
		total length	cm or mm or inches	15	Field examination	NA	NA	NS	4	
		flipper length	cm or mm or inches	12	Field examination	NA	NA	NS	2	
		flipper width	cm or mm or inches	12	Field examination	NA	NA	NS	2	
		maximum girth	cm or mm or inches	12	Field examination	NA	NA	NS	1,2 Note 18	
		girth behind flippers	cm or mm or inches	11	Field examination	NA	NA	NS	1,2 Note 18	
		tail width	cm or mm or inches	12	Field examination	NA	NA	NS	4	
		# teeth/jaw	teeth/half jaw	11	Field examination	NA	NA	NS	2	
		blubber thickness	mm	7	Field examination	NA	NA	NS	2	
		body deformity	description	2	Field examination	NA	NA	NS	2	
		overall colour	hues	1	Incidental reports	NA	NA	NS	2	
		blubber colour	hues	2	Field examination	NA	NA	NS	2	
		colour pattern	description	2	Field examination	NA	NA	NS	2	
		scar pattern	description	4	Field examination	Photographs	NA	NS	2	
		genital structure	male or female	15	Field examination Hunters' interviews	NA	NA	NS	2 Note 9	
		milk present	presence	2	Field examination	NA	NA	NS	2	
		stomach contents	presence	1	Field examination	NA	NA	NS	2	
		presence of birds	description	24	Visual observation from plane Incidental reports	NA	NA	NS	2	
		heading	compass points or relative to land	747	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		distance/time	relative	3	Visual observation from plane Incidental reports	NA	NA	NS	2	
		swimming under ice	whales/mile	1	Visual observation from plane	NA	NA	NS	2	
		orientation to ice edge	description	12	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	relative	8	Visual observation from plane	NA	NA	NS	2	
		position in water	description	1	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
78-0008 Cont'd		disturbing mud	description	4	Visual observation from plane	NA	NA	NS	2	
		splashing	presence or whales	35	Visual observation from plane	NA	NA	NS	2	
		breaching	presence or whales or breaches/whale/ sighting	45	Visual observation from plane	NA	NA	NS	2	
		tail slapping	presence	5	Visual observation from plane	NA	NA	NS	2	
		head slamming	description	1	Visual observation from plane	NA	NA	NS	4	
		gamming	presence or whales/ gam	47	Visual observation from plane	NA	NA	NS	2	
		spy-hopping	description or whales	10	Visual observation from plane	NA	NA	NS	2	
		swimming in circles	description	1	Visual observation from plane	NA	NA	NS	2	
		turning at surface	description	1	Visual observation from plane	NA	NA	NS	2	
78-0009	WW	# landed	whales/hunters/day, season	26	Field examination NS	NA	NA	NS	2,4	
		# struck and lost	whales/hunters/day, season	4	NS	NA	NA	NS	2	
		identification	species	A	Field examination Hunters' interviews NS	NA	NA	NA	NA	
		total length	feet or inches	11	Field examination Hunters' interviews NS	NA	NA	NS	2,4	
		flipper length	inches	7	Field examination Hunters' interviews NS	NA	NA	NS	2	
		flipper width	inches	5	Field examination NS	NA	NA	NS	2	
		maximum girth	inches	7	Field examination Hunters' interviews NS	NA	NA	NS	2	
		girth behind flippers	inches	5	Field examination Hunters' interviews	NA	NA	NS	2	
		tail width	inches	7	Field examination Hunters' interviews NS	NA	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
78-0009 Cont'd		blubber thickness	0.25 inches	5	Field examination NS	NA	NA	NS	2	
		overall colour	hues	1	Field examination	NA	NA	NS	2	
		scar pattern	description	1	Field examination	NA	NA	NS	2	
		genital structure	male or female	16	Field examination Hunters' interviews NS	NA	NA	NS	2 Note 9	
		stomach contents	presence	4	Field examination NS	NA	NA	NS	2	
78-0015	BW	# /aerial transect line	whales/line	62 lines	SAS; Cessna 337; 152 m; 242 km/h; 0.8 km	NA	NA	NS	3	Notes 13,15
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	5	Visual observation from plane	NA	NA	NS	2	
	WW	# /aerial transect line	whales/line	62 lines	SAS; Cessna 337; 152 m; 242 km/h; 0.8 km	NA	NA	NS	3	Notes 13,15
		# of calves	young of year or size relative to adult or subadults or juveniles	15	SAS; Cessna 337; 152 m; 242 km/h; 0.8 km	NA	NA	NS	2,3	Notes 13,15
		# /group	whales/group	3	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		overall colour	hues	1	Visual observation from plane	NA	NA	NS	2	
		heading	compass points	83	Visual observation from plane	NA	NA	NS	2	
		orientation to others	description	3	Visual observation from plane	NA	NA	NS	2	
		orientation to ice edge	description	2	Visual observation from plane	NA	NA	NS	2	
		spy-hopping	description	1	Visual observation from plane	NA	NA	NS	2	
78-0027	BW	# seen/location	relative, whales/ general	7	Incidental reports Vessel watch	NA	NA	Range given for 1 sighting: 20-30 whales	1,2 Notes 2,5	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
78-0027 Cont'd		identification	species	F	Visual observation from vessel Incidental reports	NA	NA	NA	NA	
	WW	# seen/location	relative, whales/ general	6	Incidental reports Vessel watch	NA	NA	NS	1,2 Notes 2,5	
		identification	species	F	Visual observation from vessel Incidental reports	NA	NA	NA	NA	
79-0027	BW	# seen/location	whales/relative to vessel location or presence, relative, whales/general, 1' lat. & 1' long.	66	RVS; tugboat; NS; 13-19 km /h; 8-18 km Incidental reports	NA	NA	NS	1,2 Notes 2,5	
		# of calves	calves	3	RVS; tugboat; NS; 13-19 km /h; 8-18 km	NA	NA	NS	2	
		# /group	whales/group or relative	42	Visual observation from vessel Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/0.5 nautical miles	52	RVS; tugboat; NS; 13-19 km /h; 8-18 km	NA	NA	NS	1,2 See Appendix	
		identification	species	F	Visual observation from vessel Incidental reports	NA	NA	NA	NA	
		heading	compass points	3	Incidental reports	NA	NA	NS	2	
	WW	# seen/location	presence/general	2	RVS; tugboat; NS; 13-19 km /h; 8-18 km Incidental reports	NA	NA	NS	2	
		# /group	relative	1	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	presence/km	1	RVS; tugboat; NS; 13-19 km /h; 8-18 km	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Incidental reports	NA	NA	NA	NA	
79-0028	WW	# seen/location	whales/0.1' lat. & 0.1' long.	2	RAS; Cessna 337; 152 m; 222 km/h; NS	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
79-0028 Cont'd		# /aerial transect line	whales/line	67 lines	SAS; Cessna 337; 91-152 m; 222 km/h; 0.8 km	NA	NA	NS	3	Note 13 for some & 0.1' lat. & 0.1' long. for others
		# of calves	young of year or juveniles	4	SAS; Cessna 337; 91-152 m; 22[illegible] km/h; 0.8 km RAS; Cessna 337; 152 m; 222 km/h; NS	NA	NA	NS	2	
		# /group	whales/group	3	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	25	Visual observation from plane	NA	NA	NS	2	
79-0029	BW	# seen/location	relative, whales/ general, 1' lat. & 1' long.	10	RAS; Twin Otter; 76-304 m; 161 km/h; NS	NA	NA	NS	2	
		# of calves	calves	3	RAS; Twin Otter; 76-304 m; 161 km/h; NS	NA	NA	NS	2	
		# /group	whales/pod	4	Visual observation from plane	NA	NA	NS	2	
		# /distance from land	whales/nautical mile	3	RAS; Twin Otter; 76-304 m; 161 km/h; NS	NA	NA	Range for 1 sighting: 3-5 nautical miles	2	
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	
		heading	degrees magnetic	3	NS	NA	NA	NS	2	
		distance/time	description	2	Visual observation from plane	NA	NA	NS	2	
		orientation to others	description	1	Visual observation from plane	NA	NA	NS	2	
		synchrony among animals	description	2	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	relative or whales/ nautical mile	2	Visual observation from plane	NA	NA	NS	2	
		position in water	description	7	Visual observation from plane	NA	NA	NS	2	
		rolling on side	description	1	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
79-0029 Cont'd	WW	# seen/location	whales/elapsed time, 1' lat. & 1' long.	2	RAS; Twin Otter; 76-304 m; 161 km/h; NS	NA	NA	NS	2	
		# of calves	subadults	1	RAS; Twin Otter; 76-304 m; 161 km/h; NS	NA	NA	NS	2	
		# /group	whales/group	1	Visual observation from plane	NA	NA	NS	2	
		# /distance from land	whales/nautical mile	1	RAS; Twin Otter; 76-304 m; 161 km/h; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	
		heading	degrees magnetic	1	NS	NA	NA	NS	2	
		synchrony among animals	description	1	Visual observation from plane	NA	NA	NS	2	
		position in water	description	1	Visual observation from plane	NA	NA	NS	2	
79-0030	BW	# seen/location	whales/general	1	NS	NA	NA	NS	2	
		identification	species	A	NS	NA	NA	NA	NA	
79-0031	BW	# seen/location	whales/general	6	Vessel watch Incidental reports	NA	NA	Range given for 1 sighting: 10-20 whales	2	
		identification	species	F	Visual observation from vessel Incidental reports	NA	NA	NA	NA See Appendix	
	WW	# seen/location	whales/general	3	Vessel watch Incidental reports	NA	NA	NS	2	
		identification	species	F	Visual observation from vessel Incidental reports	NA	NA	NA	NA See Appendix	
79-0034	BW	# seen/location	whales/general, 1' lat. & 1' long.	9	RAS; Cessna 185, Twin Otter; 152-915 m; 195-260 km/h; NS Incidental reports	NA	NA	NS	2	
		# /aerial transect line	whales/line	366 lines	SAS; Cessna 185, Cessna 337; 229-304 m; 195 km/h; 1.6 km	NA	NA	NS	3	Note 13

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
79-0034 Cont'd		# of calves	calves	1	RAS; Cessna 185; 304 m; 195 km/h; NS	NA	NA	NS	2	
		# /distance from vessel	whales/km, mile	2	Incidental reports	NA	NA	NS	1,2 Note 2	
		identification	species	A	Visual observation from plane Incidental reports	NA	NA	NA	NA	
		heading	compass points or degrees	9	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		orientation to ice edge	description	1	Visual observation from plane	NA	NA	NS	2	
	WW	# seen/location	presence, relative, whales/elapsed time, nautical miles & bearing from beacon, general, 1' lat. & 1' long.	99	RAS; Cessna 185, Twin Otter; 152-915 m; 195-260 km/h; NS Hunters' interviews Incidental reports	NA	NA	NS	2	
		# /aerial transect line	whales/line	366 lines	SAS; Cessna 185, Cessna 337; 229-304 m; 195 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# of calves	calves or young or young of year	50	SAS; Cessna 185, Cessna 337; 229-304 m; 195 km/h; 1.6 km Incidental reports	NA	NA	NS	2	
		# /group	whales/group	33	Visual observation from plane Incidental reports	NA	NA	NS	2	
		# landed	whales/camp, hunters /day, period	60	Hunters' interviews Visual observation from plane	NA	NA	NS	2,4	
		# struck and lost	whales/hunters/day	5	Hunters' interviews	NA	NA	NS	2,4	
		# dead/location	whales/line, general	4	SAS; Cessna 185; 229-304 m; 195 km/h; 1.6 km Incidental reports	NA	NA	NS	2	
		# /distance from aircraft	whales/feet	9	Incidental reports	NA	NA	NS	1,2 Note 2	
		# /distance from vessel	whales/miles, m, feet	8	Incidental reports	NA	NA	NS	1,2 Note 2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
79-0034 Cont'd		# /distance from land	whales/miles, yards, m, feet	12	RAS; Cessna 185, Twin Otter; 152-915 m; 195-260 km/h; NS Incidental reports	NA	NA	Range given for 1 sighting: 500-1000 m	1,2 Note 2 See Appendix	
		identification	species	A	Visual observation from plane Incidental reports Hunters' interviews	NA	NA	NA	NA	
		total length	inches	44	Hunters' interviews	NA	NA	NS	1,2 Note 12	
		flipper length	inches	1	Hunters' interviews	NA	NA	NS	2	
		flipper width	inches	2	Hunters' interviews	NA	NA	NS	2	
		maximum girth	inches	2	Hunters' interviews	NA	NA	NS	2	
		tail width	inches	1	Hunters' interviews	NA	NA	NS	4	
		overall colour	hues	55	Hunters' interviews Visual observation from plane	NA	NA	NS	2	
		scar pattern	description	1	Hunters' interviews	NA	NA	NS	2	
		genital structure	male or female	59	Hunters' interviews	NA	NA	NS	2 Note 9	
		fetus present	presence	1	Hunters' interviews	NA	NA	NS	2	
		fetus length	inches	1	Hunters' interviews	NA	NA	NS	2	
		stomach contents	presence, identified to order	6	Hunters' interviews	NA	NA	NS	2	
		presence of birds	description	24	Visual observation from plane Incidental reports	NA	NA	NS	2	
		heading	compass points or degrees magnetic or relative to land	598	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		orientation to others	description	1	Visual observation from plane	NA	NA	NS	2	
		orientation to aircraft	description	1	Incidental reports	NA	NA	NS	2	
		orientation to ice edge	description	6	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	description	4	Visual observation from plane	NA	NA	NS	2	
		position in water	description	6	Visual observation from plane Incidental reports	NA	NA	NS	2	
		disturbing mud	description	3	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
79-0034 Cont'd		splashing	relative or presence or whales	13	Visual observation from plane	NA	NA	NS	2	
		tail slapping	description	1	Visual observation from plane	NA	NA	NS	4	
		head slamming	description	2	Visual observation from plane	NA	NA	NS	4	
		gamming	description or presence or relative or whales/gam	17	Visual observation from plane	NA	NA	NS	2	
		spy-hopping	presence or relative	4	Visual observation from plane	NA	NA	NS	2	
		dive characteristics	description	8	Visual observation from plane	NA	NA	NS	2	
79-0035	WW	# landed	whales/hunters/day	34	Hunters' interviews	NA	NA	NS	2,4	
		# struck and lost	whales/hunters/day	8	Hunters' interviews	NA	NA	NS	2,4	
		identification	species	A	Hunters' interviews	NA	NA	NA	NA	
80-0019	BW	# seen/location	whales/0.1' lat. & 0.1' long. or tagged whale/0.1' lat. & 0.1' long./surfacing	239	RAS; Grumman Goose, Skymaster; NS; NS; NS RVS; 48 ft. Seiner, 48 ft. Ketch; NS; NS; NS	NA	NA	NS	2	
		# /aerial transect line	whales/line	28 lines	SAS; Grumman Goose; NS; NS; NS	NA	NA	NS	2	
		# of calves	juveniles	1	RVS; 48 ft. Seiner, 48 ft. Ketch; NS; NS; NS	NA	NA	NS	2	
		# /group	relative	1	Visual observation from plane	NA	NA	NS	2	
		# /distance from vessel	presence/m	2	RVS; 16 ft. Lund; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Visual observation from plane	NA	NA	NA	NA	
			tag #	2	Barnacle radio-tag with coloured streamer implanted with a drug immobilization rifle	NA	NA	NA	NA	
		total length	feet	3	NS	NA	NA	NS	2	
		scar pattern	NS	NS	Visual observation from vessel	NA	NA	NS	See Appendix 2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0019 Cont'd		heading	compass points	1	NS	NA	NA	NS	2	
		distance/time	relative	2	Visual observation from vessel	NA	NA	NS	2	
		dive time	NS	7	Visual observation from vessel	NA	NA	NS	2	
		surface time	NS	8	Visual observation from vessel	NA	NA	NS	2	
		# surfacings/time	signals/time	24	Signals from radio-tag received by Telonics TR-2 receiver, TS-1 scanner, TDP-2 processor & DF receiver	NA	NA	NS	1 Note 8	
		distance between individuals	relative	1	Visual observation from vessel	NA	NA	NS	2	
		position in water	description	2	Visual observation from vessel	NA	NA	NS	2	
		rolling on side	description	1	Visual observation from vessel	NA	NA	NS	2	
	CW	# seen/location	whales/NS	1	RAS; Grumman Goose; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# seen/location	hundreds, whales/ general, 0.1' lat. & 0.1' long.	37	RAS; Grumman Goose, Skymaster; NS; NS; NS RVS; 48 ft. Seiner, 48 ft. Ketch; NS; NS; NS	NA	NA	NS	2	
		# /aerial survey line	whales/line	28 lines	SAS; Grumman Goose; NS; NS; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane Visual observation from vessel NS	NA	NA	NA	NA	
		heading	compass points	1	NS	NA	NA	NS	2	
80-0020	WW	# seen/location	presence, relative, whales/general	7	Hunters' interviews RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# of calves	young	1	Hunters' interviews	NA	NA	NS	2	
		# landed	whales/camp, hunters /day, period	72	Field examination Hunters' interviews	NA	NA	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0020 Cont'd		# struck and lost	whales/area, hunter	5	Hunters' interviews Visual observation	NA	NA	NS	2,4	
		# dead/location	whales/general	3	Incidental reports NS	NA	NA	NS	2	
		identification	species	A	Hunters' interviews Field examination Visual observation from plane Incidental reports NS	NA	NA	NA	NA	
		total length	feet or inches	72	Field examination Hunters' interviews	NA	NA	Range given for 1 whale: 10-15 feet	1,2,4 Note 12	
		maximum girth	feet or inches	3	Field examination	NA	NA	NS	2	
		overall colour	hues	70	Field examination Hunters' interviews	NA	NA	NS	2	
		genital structure	male or female	72	Field examination Hunters' interviews	NA	NA	NS	2 Note 9	
		stomach contents	presence	3	Field examination	NA	NA	NS	2	
80-0021	BW	# seen/location	NS	NS	NS	NA	NA	NS	2 Note 9	
		# of calves	calves	9	RVS; NS; NS; NS; NS RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# /group	whales/group	1	Visual observation from plane	NA	NA	NS	2 Note 9	
		# /distance from aircraft	NS	NS	NS	NA	NA	NS	2 Note 9	
		# /distance from vessel	whales/km	1	RVS; NS; NS; NS; NS	NA	NA	NS	2 Note 9	Note 6
		identification	species	A	Visual observation from vessel Visual observation from plane NS	NA	NA	NA	NA	
		total length	relative	370	Visual observation from vessel Visual observation from plane	NA	NA	NS	1,2 Note 14 See Appendix	
		overall colour	hues	NS	NS	NA	NA	NS	2 Note 9	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0022	BW	# seen/location	whales/0.1° lat. & 0.1° long.	2	RAS; Grumman Goose; 30-549 m; 222-259 km/h; NS	NA	NA	NS	3	Contradictory information on plane altitude and speed given
		# /distance from aircraft	whales/degrees from horizontal	2	RAS; Grumman Goose; 30-549 m; 222-259 km/h; NS & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane NS	NA	NA	NA	NA	
		total length	m	1	Visual observation from plane	NA	NA	NS	1 Note 14	
		heading	degrees magnetic	2	NS	NA	NA	NS	2	
80-0023	BW	# seen/location	presence, whales/general, 1° lat. & 1° long.	26	Vessel watch Incidental reports	NA	NA	Ranges given for 2 sightings: 1-2, 8-9 whales	2	
		# of calves	calves	2	Incidental reports	NA	NA	NS	2	
		# /group	whales/group	1	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/miles	7	Vessel watch	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Incidental reports	NA	NA	NA	NA	
		heading	compass points or degrees	14	Visual observation from vessel Incidental reports	NA	NA	NS	2	
		# blows/surfacings	relative	1	Visual observation from vessel	NA	NA	NS	2	
	WW	# seen/location	whales/general	5	Vessel watch Incidental reports	NA	NA	NS	2	
		identification	species	A	Visual observation from vessel Incidental reports	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0025	BW	# seen/location	whales/1' lat. & 1' long.	NS	RAS; Islander; 168-610 m; 148-185 km/h; NS RVS; 14 m Ketch, 16.1 m crewboat; NS; NS; NS Shore watch	Videotapes	NA	Distance usually within 1.8 km for sightings from plane	2,3	
		# /aerial transect line	whales/line	55 lines	SAS; Islander; 610 m; 185 km/h; 0.8 km	Videotapes ?	NA	NS	3	
		# of calves	size relative to adult	12	SAS; Islander; 610 m; 185 km/h; 0.8 km RAS; Islander; 168-610 m; 148-185 km/h; NS	Videotapes	NA	NS	2,3	
		# /group	whales/group	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		# /distance from aircraft	whales/altitude in m	F	RAS; Islander; 168-610 m; 148-185 km/h; NS	Videotapes	NA	NS	2,3	
		# /distance from vessel	whales/km	NS	RVS; 14 m Ketch, 16.1 m crewboat; NS; NS; NS RAS; Islander; 168-610 m; 148-185 km/h; NS Experimental trials	Videotapes	NA	NS	2,3	
		# /distance from land	whales/horizontal & vertical bearings	NS	Visual observation from land & Wild theodolite Model T1	NA	NA	Accuracy: 6 sec.	2,4	
		identification	species	A	Visual observation from plane Visual observation from vessel Visual observation from land Hydroacoustics	NA	NA	NA	NA	
		overall colour	hues	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		colour pattern	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		scar pattern	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		mud coming from mouth	description	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		defecating	defecations	23	Visual observation from plane	Videotapes	NA	NS	4	
		heading	degrees true	F	Visual observation from plane	Videotapes	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0025 Cont'd		distance/time	horizontal & vertical bearings/sec. or relative	F	Visual observation from land & Wild theodolite Model T1	Videotapes of some sightings	NA	Accuracy: 6 sec.	2,4	
		distance between tail beats	fluke tracks/whale length	NS	Visual observation from plane	NS	NA	NS	2 Note 9	
		dive time	0.01 minutes	36	Visual observation from plane	NS	NA	NS	1,2,4 Note 8	Note 19
		surface time	0.01 minutes	158	Visual observation from plane Visual observation from land	Videotapes	NA	NS	2,4	Note 19
		time between blows	0.1 sec.	1106	Visual observation from plane Visual observation from land	Videotapes	NA	NS	2,4	Note 19
		# blows/surfacing	blows/surfacing	108	Visual observation from plane	Videotapes	NA	NS	2,4	Note 19
		# underwater blows	blows	158	Visual observation from plane Hydroacoustics	Videotapes & NS	NA	NS	2,4	
		pushes	pushes	R	Visual observation from plane	Videotapes	NA	NS	4	
		chases	chases	R	Visual observation from plane	Videotapes	NA	NS	4	
		orientation to others	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		orientation to vessel	description & degrees true relative to vessel	NS	Visual observation from vessel Visual observation from plane	Videotapes	NA	NS	2,4	
		synchrony among individuals	behaviour/day or surfacings/sec.	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		distance between individuals	whale lengths or m	F	Visual observation from plane	Videotapes	NA	NS	2,3	
		position in water	description	NS	Visual observation from plane	Videotapes	NA	NS	2,4	
		disturbing mud	description	NS	Visual observation from plane	Videotapes	NA	NS	2,4	
		breaching	description & time between breaches	2	Visual observation from plane	Videotapes	NA	NS	4	
		tail slapping	description & time between slaps	2	Visual observation from plane	Videotapes	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0025 Cont'd		head slamming	description & head slams/5 sec.	1	Visual observation from plane	Videotapes	NA	NS	2	
		flipper slapping	description & time between slaps	2	Visual observation from plane	Videotapes	NA	NS	4	
		mouth open	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		forward lunges	lunges	R	Visual observation from plane	Videotapes	NA	NS	2 Note 9	
		dive characteristics	pre-dive flexes & back arches & flukes out of water	F	Visual observation from plane	Videotapes	NA	NS	4	
		turning at surface	presence & direction	NS	Visual observation from plane	Videotapes	NA	NS	2	
		# calls/whale-hour	calls/type/whales within 3-4 km x minutes	7.67 hours	Sonobuoy AN/SSQ-41B & Nems-Clarke wideband telemetry receiver model R1302-B & Sony TC-D5M cassette recorder	Videotapes & audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	Ranges given for 2 occasions: 8-10, 12-15 whales	1,4	
		# calls/type/time	calls/type/minute	7.67 hours	Sonobuoy AN/SSQ-41B & Nems-Clarke wideband telemetry receiver model R1302-B & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	NS	4 See Appendix	
		call frequency spectrum	Hz	254 calls	Sonobuoy AN/SSQ-41B & Nems-Clarke wideband telemetry receiver model R1302-B & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	plus or minus 10 Hz	4	
		call duration	0.1 sec.	254 calls	Sonobuoy AN/SSQ-41B & Nems-Clarke wideband telemetry receiver model R1302-B & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	plus or minus 0.1 sec.	4	
	WW	# seen/location	NS	NS	NS	NA	NA	NS	2	
		identification	species	NS	NS	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0026	BW	# seen/location	whales/1' lat. & 1' long.	NS	RAS; Islander; NS; NS; NS	NA	NA	NS	2	
		# /aerial transect line	whales/line	54 lines	SAS; Twin Otter, Islander; 150-300 m; 241 km/h; 1.6 km	NA	NA	NS	3	Note 15, Note 13 for some sightings
		# of calves	calves	6	SAS; Islander; 150-300 m; 241 km/h; 1.6 km	NA	NA	NS	2,3	
		# /group	whales/group	330	Visual observation from plane	NA	NA	NS	3	
		# /distance from vessel	NS	NS	SAS; Islander; 150-300 m; 241 km/h; 1.6 km	NA	NA	NS	2 See Appendix	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		calf-to-adult length ratio	percent	2	Visual observation from plane	NA	NA	NS	1 Note 14	
		overall colour	hues	3	Visual observation from plane	NA	NA	NS	2	
		defecating	description	R	Visual observation from plane	Photographs	NA	NS	2,4	
		heading	compass points	292	Visual observation from plane	NA	NA	NS	2	
		distance/time	relative	3	Visual observation from plane	NA	NA	NS	2	
		orientation to others	description	1	Visual observation from plane	Photographs	NA	NS	4	
		orientation to vessel	NS	NS	Visual observation from plane	NA	NA	NS	2 See Appendix	
		distance between individuals	description	2	Visual observation from plane	Photographs	NA	NS	2	
		position in water	description	R	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	R	Visual observation from plane	NA	NA	NS	2	
	CW	# /aerial transect line	whales/line	54 lines	SAS; Islander; 150-300 m; 241 km/h; 1.6 km	Photographs	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		mud coming from mouth	description	NS	Visual observation from plane	NA	NA	NS	2,4	
		surface time	minutes/surfacing	3	Visual observation from plane	NA	NA	NS	2	Note 3

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0026 Cont'd	WW	# seen/location	NS	2	RAS; Twin Otter; NS; NS; NS	NA	NA	NS	2	
		# /aerial transect line	whales/line	54 lines	SAS; Twin Otter, Islander; 150-300 m; 241 km/h; 1.6 km	NA	NA	NS	3	Note 15, Note 13 for some sightings
		# /group	whales/group	139	Visual observation from plane	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	120	Visual observation from plane	NA	NA	NS	2	
80-0029	BW	# seen/location	whales/general, 1' lat. & 1' long.	22	Incidental reports	NA	NA	Ranges given for 3 sightings: 7-12, 20-30, 40-50 whales	1,2 Note 2	
		# /aerial transect line	whales/line	297 lines	SAS; Cessna 337; 304 m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# of calves	juveniles or young	2	SAS; Cessna 337; 304 m; 193 km/h; 1.6 km Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/mile, 0.25 miles, km, m	19	Incidental reports	NA	NA	Ranges given for 2 sightings: 0.25-0.75, 0.5-2.0 miles	1 Note 2	
		identification	species	A	Visual observation from plane Incidental reports	NA	NA	NA	NA	
		total length	feet	7	Visual observation from plane Incidental reports	NA	NA	Ranges given for several sightings: 20-25, 20-40, 20-45, 25-40, 35-45 feet	1 Notes 2,14	
		tail width	feet	3	Incidental reports	NA	NA	Ranges given for each sighting: 6-10, 8-10, 12-15 feet	1 Notes 2,14	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0029 Cont'd		overall colour	hues	3	Visual observation from plane Incidental reports	NA	NA	NS	2	
		colour pattern	description	1	Incidental reports	NA	NA	NS	2	
		defecating	presence	1	Incidental reports	NA	NA	NS	2	
		heading	compass points or degrees true	32	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		distance between individuals	relative	1	Incidental reports	NA	NA	NS	2	
		position in water	description	6	Visual observation from plane Incidental reports	NA	NA	NS	2	
		dive characteristics	description	1	Incidental reports	NA	NA	NS	2	
	WW	# seen/location	relative, whales/ general, elapsed time, 0.1' lat. & 0.1' long.	199	RAS; Twin Otter, Cessna 185; 304-610 m; 193-259 km /h; NS Hunters' interviews Incidental reports	NA	NA	Range given for 1 sighting: 50-60 whales	1,2 Note 2	
		# /aerial transect line	whales/line	297 lines	SAS; Cessna 185, Cessna 337; 152-304 m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# of calves	young of year or newborn or young or calves or yearlings	75	RAS; Twin Otter, Cessna 185; 304-610 m; 193-259 km /h; NS SAS; Cessna 185, Cessna 337; 152-304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /group	whales/group	6	Visual observation from plane Incidental reports	NA	NA	NS	2	
		# landed	whales/hunters, area /day	5	Hunters' interviews Field examination Visual observation from plane	NA	NA	NS	2,4	
		# struck and lost	whales/hunters/day	1	Hunters' interviews	NA	NA	NS	2	
		# dead/location	whales/line or whales/general	3	SAS; Cessna 185; 152-304 m, 193 km/h; 1.6 km Incidental reports	NA	NA	NS	2	
		# /distance from aircraft	whales/feet	2	Incidental reports	NA	NA	NS	1 Note 2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0029 Cont'd		# /distance from land	whales/feet	1	SAS; Cessna 185; 152-304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		identification	species	4	Visual observation from plane Incidental reports Hunters' interviews Field examination	NA	NA	NA	NA	
		total length	feet	1	Incidental reports	NA	NA	Range given: 10-15 feet	1 Notes 2,14	
		genital structure	male or female	3	Hunters' interviews Field examination	NA	NA	NS	2 Note 9	
		stomach contents	presence, identified to phylum	3	Hunters' interviews	NA	NA	NS	2	
		presence of birds	description	10	Visual observation from plane Incidental reports	NA	NA	NS	2	
		heading	compass points or relative to land	426	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		swimming under ice	description	1	Visual observation from plane	NA	NA	NS	2	
		pushes	description	1	Visual observation from plane	NA	NA	NS	2	
		orientation to ice edge	description	5	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	relative or feet	2	Visual observation from plane	NA	NA	NS	2	
		position in water	description	2	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	12	Visual observation from plane	NA	NA	NS	2	
		splashing	whales or time between splashes	28	Visual observation from plane	NA	NA	NS	2	
		breaching	description	1	Visual observation from plane	NA	NA	NS	2	
		head slamming	description	2	Visual observation from plane	NA	NA	NS	2	
		gamming	presence or whales	12	Visual observation from plane Incidental reports	NA	NA	NS	2	
		spy-hopping	presence	3	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
80-0029 Cont'd		dive characteristics	description	1	Visual observation from plane	NA	NA	NS	2	
81-0022	WW	# landed	whales/hunters, area /day	137	Field examination Hunters' interviews	NA	NA	NS	2,4	
		# struck and lost	NS	21	Hunters' interviews	NA	NA	NS	2	
		# struck, killed and lost	whales/camp/day, period	6	Hunters' interviews	NA	NA	NS	2,4	
		# dead/location	whales/general	33	NS	NA	NA	NS	2	
		identification	species	A	Field examination Hunters' interviews NS	NA	NA	NA	NA	
		total length	inches	110	Field examination Hunters' interviews	NA	NA	NS	2,4	
		# of dentine layers	NS	NS	Lab examination	NA	NA	NS	2	
		overall colour	hues	108	Field examination	NA	NA	NS	2	
		genital structure	male or female	115	Field examination NS	NA	NA	NS	2 Note 9	
		fetus present	presence	7	Field examination Lab examination	Frozen	NA	NS	2,4	
		fetus length	inches or mm	11	Field examination Lab examination	Frozen	NA	NS	2,4	
		milk present	presence	NS	Field examination	NA	NA	NS	2	
		stomach contents	presence, identified to species or percent full	45	Field examination	NS	NA	NS	2	
81-0023	BW	# seen/location	whales/general	2	Incidental reports	NA	NA	Range given for 1 sighting: 20-30 whales	1 Note 2	
		# /distance from aircraft	whales/altitude in feet	1	Incidental reports	NA	NA	NS	1 Note 2	
		# /distance from vessel	whales/feet	1	Incidental reports	NA	NA	NS	1 Note 2	
		identification	species	A	Incidental reports	NA	NA	NA	NA	
		total length	feet	1	Incidental reports	NA	NA	NS	1 Note 14	
		heading	compass points	2	Incidental reports	NA	NA	NS	2	
		distance/time	miles/hour	1	Incidental reports	NA	NA	NS	2	
		orientation to others	description	1	Incidental reports	NA	NA	NS	2	
		orientation to vessel	description	1	Incidental reports	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0023 Cont'd	WW	# seen/location	relative, whales/ elapsed time, general, 0.1' lat. & 0.1' long.	392	RAS; Islander, Cessna 185; 305-610 m; 193 km/h; NS Incidental reports	NA	NA	Ranges given for several sightings: 8-12, 10-15, 15-20, 30-35, 30-40, 35-40, 50-60, 60-70, 200-300 whales	1,2 Note 2	
		# /aerial transect line	whales/line	196 lines	SAS; Cessna 185; 183-457 m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15
		# of calves	young of year or newborn or calves or young or 3-year olds	88	RAS; Islander, Cessna 185; 305-610 m; 193 km/h; NS SAS; Cessna 185; 183-457 m; 193 km/h; 1.6 km Hunters' interviews Incidental reports	NA	NA	NS	1,2 Note 2	
		# /group	relative, whales/ group, description	16	Visual observation from plane Incidental reports	NA	NA	Range given for 1 sighting: 200-300 whales	1,2 Note 2	
		# landed	whales/boat, hunters	3	Visual observation from plane Hunters' interviews	NA	NA	NS	2	
		# dead/location	whales/line	3	SAS; Cessna 185; 183-457 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /distance from aircraft	whales/altitude in feet, altitude & miles from flight path	10	Incidental reports	NA	NA	NS	1 Note 2	
		# /distance from vessel	whales/miles, yards, m or relative	11	RAS; Islander, Cessna 185; 305-610 m; 193 km/h; NS Incidental reports	NA	NS	NS	1,2 Note 2	
		identification	species	A	Visual observation from plane Incidental reports Hunters' interviews	NA	NA	NA	NA	
		total length	feet	2	Hunters' interviews Incidental reports	NA	NA	Range given for 1 whale: 5-6 feet	1 Note 14	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0023 Cont'd		overall colour	hues	5	Visual observation from plane	NA	NA	NS	2	
		genital structure	female	1	Hunters' interviews	NA	NA	NS	2 Note 9	
		presence of birds	description	14	Visual observation from plane Incidental reports	NA	NA	NS	2	
		heading	compass points or degrees true or relative to land	437	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		distance/time	relative or miles/ hour or knots	6	Visual observation from plane Incidental reports	NA	NA	Range given for 1: 2-3 knots	2	
		swimming under ice	description or diagram	5	Visual observation from plane	NA	NA	NS	2,4	
		orientation to vessel	description & diagram	15	Visual observation from plane	NA	NA	NS	2,4	
		orientation to ice edge	diagram &/or description	18	Visual observation from plane	NA	NA	NS	2,4	
		distance between individuals	relative	3	Visual observation from plane Incidental reports	NA	NA	NS	2	
		position in water	description	9	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	3	Visual observation from plane	NA	NA	NS	2,4	
		splashing	presence or whales	18	Visual observation from plane	NA	NA	NS	2	
		breaching	presence or whales	4	Visual observation from plane Incidental reports	NA	NA	NS	2	
		tail slapping	whales	1	Visual observation from plane	NA	NA	NS	2	
		gamming	presence	5	Visual observation from plane	NA	NA	NS	2	
		swimming in circles	description	2	Visual observation from plane	NA	NA	NS	2	
		dive characteristics	description	3	Visual observation from plane	NA	NA	NS	2	
81-0024	WW	# /aerial transect line	whales/line	61 lines	SAS; Cessna 337; 152 m; 258 km/h; 0.8 km	NA	NA	NS	3	Note 13

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0024 Cont'd		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	6	Visual observation from plane	NA	NA	NS	2	
81-0025	BW	# seen/location	whales/general, 1' lat. & 1' long.	35	Incidental reports Vessel watch	NA	NA	NS	1,2 Notes 2,5	
		# of calves	calves	1	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/miles, km, m	7	Incidental reports	NA	NA	Ranges given for several sightings: 3-5 km, 1/2-1, 1-2 miles	1,2 Note 2	
		identification	species	F	Incidental reports Visual observation from vessel	NA	NA	NA	NA	
		heading	compass points	9	Incidental reports	NA	NA	NS	2	
	WW	# seen/location	whales/general	6	Incidental reports Vessel watch	NA	NA	Range given for 1 sighting: 10-15 whales	1,2 Notes 2,5	
		# of calves	calves	1	Incidental reports	NA	NA	NS	2	
		# dead/location	whales/general	4	Incidental reports Vessel watch	NA	NA	NS	2	
		# /distance from vessel	whales/miles, feet	2	Incidental reports	NA	NA	Range given for 1 sighting: 2-3 miles	2	
		identification	species	F	Incidental reports Visual observation from vessel	NA	NA	NA	NA	
81-0026	BW	# seen/location	whales/0.1' lat. & 0.1' long.	NS	RAS; Twin Otter; 90-915 m; 150-220 km/h; NS	NA	NA	NS	3,4	
		# /aerial transect line	whales/line	206 lines	SAS; Twin Otter; 150-300 m; 200 km/h; 2.0 km	NA	NA	NS	3,4	Note 13 for some sightings, Note 15
		# of calves	calves	6	SAS; Twin Otter; 150-300 m; 200 km/h; 2.0 km RAS; Twin Otter; 90-915 m; 150-220 km/h; NS	Photographs	NA	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0026 Cont'd		# /group	whales/group	F	Visual observation from plane	NA	NA	NS	3,4	
		# /distance from aircraft	whales/degrees from horizontal	F	RAS; Twin Otter; 90-915 m; 150-220 km/h; NS & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane Lab examination of photographs	NA	NA	NA	NA	
		total length	0.01 mm	65	Lab measurements from photographs obtained using Asahi Pentax 6x7 cm camera with penta prism view-finder & 105 or 200 mm SMC Takumar lens	6x7 cm colour & black-and-white photographs	Zeiss binocular dissecting scope	Precision: plus or minus 2.71%	4	
		tail width	0.01 mm	24	Lab measurements from photographs obtained using Asahi Pentax 6x7 cm camera with penta prism view-finder & 105 or 200 mm SMC Takumar lens	6x7 cm colour & black-and-white photographs	Zeiss binocular dissecting scope	Precision: plus or minus 2.03%	4	
		snout-to-blowhole length	0.01 mm	25	Lab measurements from photographs obtained using Asahi Pentax 6x7 cm camera with penta prism view-finder & 105 or 200 mm SMC Takumar lens	6x7 cm colour & black-and-white photographs	Zeiss binocular dissecting scope	Precision: plus or minus 2.03%	4	
		colour pattern	description	F	Visual observation from plane	6x7 cm colour & black-and-white photographs	NA	NS	2,4	
		scar pattern	description	F	Visual observation from plane	6x7 cm colour & black-and-white photographs	NA	NS	2,4	
		mud coming from mouth	presence	NS	Visual observation from plane	NA	NA	NS	2	
		defecating	presence	NS	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0026 Cont'd		heading	degrees true or compass degrees	F	Visual observation from plane	NA	NA	NS	2	
		distance/time	relative	1	Visual observation from plane	NA	NA	NS	2	
		dive time	0.1 sec.	NS	Visual observation from plane	NA	NA	NS	1,2,4 Note 8	
		surface time	0.1 sec.	NS	Visual observation from plane	NA	NA	NS	2,4	
		time between blows	NS	NS	Visual observation from plane	NA	NA	NS	2	
		# blow/surfacing	NS	NS	Visual observation from plane	NA	NA	NS	2	
		# underwater blows	NS	NS	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	whale lengths	NS	Visual observation from plane	NA	NA	NS	3	
		position in water	NS	NS	Visual observation from plane	NA	NA	NS	2	
	WW	# seen/location	whales/0.1' lat. & 0.1' long.	NS	RAS; Twin Otter; 150-915 m; 150-220 km/h; NS	NA	NA	NS	3,4	
		# /aerial transect line	whales/line	206 lines	SAS; Twin Otter; 150-300 m; 200 km/h; 1.6 km	NA	NA	NS	3,4	
		# of calves	neonates or sub-adults or yearlings	NS	SAS; Twin Otter; 150-300 m; 200 km/h; 1.6 km RAS; Twin Otter; 150-915 m; 150-220 km/h; NS	Photographs	NA	NS	2	
		# /group	whales/group	NS	Visual observation from plane	Photographs	NA	NS	2,3	
		# /distance from aircraft	whales/degrees from horizontal	462	RAS; Twin Otter; 90-915 m; 150-220 km/h; NS & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	NS	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0027	BW	# seen/location	whales/1' lat. & 1' long.	NS	RAS; Islander; 194-610 m; 148-185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS Shore watch	Videotapes	NA	Distances usually accurate within 1.8 km for sightings from plane	2,3 See Appendix	
		# /aerial transect line	whales/line	10 lines	SAS; Islander; NS; NS; NS	NS	NA	NS	2	
		# of calves	calves or young of year or subadults	16	RAS; Islander; 194-610 m; 148-185 km/h; NS Shore watch	Videotapes	NA	NS	2,4	
		# /group	whales/group	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		# /distance from aircraft	whales/altitude in m	F	RAS; Islander; 194-610 m; 148-185 km/h; NS & radar altimeter Experimental trials	Videotapes	NA	NS	2,3	
		# /distance from vessel	whales/km	NS	RAS; Islander; 194-610 m; 148-185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS Experimental trials	Videotapes	NA	NS	2,3	
		# /distance from land	whales/horizontal & vertical bearings	NS	Visual observation from land & Nikon Model NT-2A theodolite	NA	NA	Accuracy: 20 sec.	2,4	
		identification	species	A	Visual observation from plane Visual observation from vessel Visual observation from land Lab examination of videotapes Hydroacoustics	NA	NA	NA	NA	
		calf-to-adult length ratio	percent	6	Lab examination of videotapes	Videotapes	NA	NS	2,4	
		colour pattern	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		scar pattern	description	F	Visual observation from plane	Videotapes	NA	NS	2	
		mud coming from mouth	description	R	Visual observation from plane	Videotapes	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0027 Cont'd		defecating	defecations	11	Visual observation from plane	Videotapes	NA	NS	4	
		heading	degrees true	F	Visual observation from plane	Videotapes	NA	NS	2	
		distance/time	horizontal & vertical bearings/sec. or relative	F	Visual observation from land & Nikon NT-2A theodolite	Videotapes of some sightings	NA	Accuracy: 20 sec.	2,4	
		swimming under ice	description	R	Visual observation from plane	Videotapes	NA	NS	2	
		distance between tail beats	fluke tracks/whale length	NS	Visual observation from plane	NS	NA	NS	2 Note 9	
		dive time	0.01 minutes	128	Visual observation from plane	NS	NA	NS	1,2,4 Note 8	Note 19
		surface time	0.01 minutes	341	Visual observation from plane Visual observation from land	Videotapes	NA	NS	2,4	Note 19
		time between blows	sec.	1439	Visual observation from plane Visual observation from land	Videotapes	NA	NS	2,4	Note 19
		# blows/surfacing	blows/surfacing	296	Visual observation from plane	Videotapes	NA	NS	2,4	Note 19
		# underwater blows	blows	66	Visual observation from plane	Videotapes	NA	NS	4	
		nudges	nudges	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		pushes	pushes	R	Visual observation from plane	Videotapes	NA	NS	2	
		chases	chases	R	Visual observation from plane	Videotapes	NA	NS	4	
		orientation to others	description or diagram	F	Visual observation from plane Visual observation from land	Videotapes	NA	NS	2,4	
		orientation to vessel	description	NS	Visual observation from vessel Visual observation from plane	Videotapes	NA	NS	2,4	
		synchrony among animals	# of groups visible/circle flown or heading of whales/circling flight	F	Visual observation from plane	Videotapes	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0027 Cont'd		distance between individuals	whale lengths or 0.1 whale length	F	Visual observation from plane Lab examination of videotapes	Videotapes	NA	NS	2,4	
		position in water	description	NS	Visual observation from plane	Videotapes	NA	NS	2,4	
		breaching	description or full breaches or half breaches or time between breaches	R	Visual observation from plane Visual observation from land	Videotapes	NA	NS	4	
		tail slapping	tail slaps	R	Visual observation from plane Visual observation from land	Videotapes	NA	NS	4	
		flipper slapping	flipper slaps	R	Visual observation from plane Visual observation from land	Videotapes	NA	NS	4	
		mouth open	description	F	Visual observation from plane	Videotapes	NA	NS	2	
		forward lunges	lunges	R	Visual observation from plane Visual observation from land	Videotapes	NA	NS	4	
		rolling on side	rolls	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		dive characteristics	pre-dive flexes & back arches & flukes out of water	F	Visual observation from plane	Videotapes	NA	NS	4	
		turning at surface	surfacings	R	Visual observation from plane	Videotapes	NA	NS	2	
		log pushing	pushes	R	Visual observation from plane	Videotapes	NA	NS	4	
		log clasping	description	2	Visual observation from plane	Videotapes	NA	NS	2	
		rolling log along body	description	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		mating	description	2	Visual observation from plane	Videotapes	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0027 Cont'd		# calls/whale-hour	calls/type/whales × minutes	NS	Sonobuoy AN/SSQ-41B, AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	Ranges given for 8 occasions: 5-6, 4-6, 20-30 whales	1,4	
		# calls/type/time	calls/type/minute	NS	Sonobuoy AN/SSQ-41B, AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	NS	4	
		call frequency spectrum	Hz	979 calls	Sonobuoy AN/SSQ-41B, AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	plus or minus 10 Hz	4	
		call duration	0.1 sec.	979 calls	Sonobuoy AN/SSQ-41B, AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer or Kay 6019A Spectrograph	plus or minus 0.1 sec.	4	
	GW	# seen/location	NS	NS	RAS; Islander; 194-610 m; 148-185 km/h; NS	NS	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# seen/location	NS	NS	RAS; Islander; 194-610 m; 148-185 km/h; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
81-0052	BW	# seen/location	whales/0.1' lat. & 0.1' long.	41	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# of calves	calves	1	RAS; NS; NS; NS; NS	NA	NA	NS	2	
		# /group	whales/group	2	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
81-0052 Cont'd		heading	compass points	1	Visual observation from plane	NA	NA	NS	2	
		dive time	sec.	26	Visual observation from plane	NA	NA	NS	1,2 See Appendix	
		surface time	sec.	30	Visual observation from plane	NA	NA	NS	1,2 See Appendix	
82-0001	BW	# seen/location	whales/general, elapsed time, 1' lat. & 1' long.	8	RAS; Twin Otter, Cessna 337, Aerocommander, Navejo Chieftain, Cessna 185; 152-457 m; 193-398 km/h; NS Incidental reports	NA	NA	NS	1,2 Note 2	
		# /distance from aircraft	whales/mile or whales/altitude in feet	2	Incidental reports	NA	NA	NS	1 Note 2	
		# /distance from vessel	whales/mile	1	Incidental reports	NA	NA	NS	2	
		# /distance from land	whales/m	2	Incidental reports	NA	NA	NS	2	
		identification	species	A	Incidental reports Visual observation from plane	NA	NA	NA	NA	
		overall colour	hues	1	Incidental reports	NA	NA	NS	2	
		heading	compass points or degrees true	9	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		position in water	description	1	Incidental reports	NA	NA	NS	2	
		splashing	whales	1	Visual observation from plane	NA	NA	NS	2	
	WW	# seen/location	presence, whales/general, elapsed time, 1' lat. & 1' long.	178	RAS; Twin Otter, Cessna 337, Aerocommander, Navejo Chieftain, Cessna 185; 152-457 m; 193-398 km/h; NS Incidental reports	NA	NA	Range given for 1 sighting: 20-30 whales	1,2 Note 2	
		# /aerial transect line	whales/line	110 lines	SAS; Cessna 185; 244-304 m; 193 km/h; 1.6 km	NA	NA	NS	3	Notes 13,15

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0001 Cont'd		# of calves	young of year or yearlings or juveniles or young or calves	73	RAS; Twin Otter, Cessna 337, Aerocommander, Navejo Chieftain, Cessna 185; 152-457 m; 193-398 km/h; NS SAS; Cessna 185; 244-304 m; 193 km/h; 1.6 km Incidental reports	NA	NA	NS	1,2 Note 2	
		# /group	relative, whales/group, pod	19	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 2	
		# landed	whales/area/day	3	Visual observation from plane Hunters' interviews	NA	NA	NS	2,4	
		# dead/location	whales/line	1	SAS; Cessna 185; 244-304 m; 193 km/h; 1.6 km	NA	NA	NS	2	
		# /distance from aircraft	whales/mile, feet	2	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/15 sec. intervals & vessel/15 sec. intervals or whales/mile, feet	6	SAS; Cessna 185; 244-304 m; 193 km/h; 1.6 km Incidental reports	NA	NA	Range given for 1 sighting: 2-3 miles	1,2 Note 2 See Appendix	
		# /distance from land	whales/miles, m	10	RAS; Cessna 185; 304 m; 193 km/h; NS Incidental reports	NA	NA	Range given for 1 sighting: 100-200 m	2	
		identification	species	4	Visual observation from plane Incidental reports Hunters' interviews	NA	NA	NA	NA	
		overall colour	hues	3	Visual observation from plane Incidental reports	NA	NA	NS	2	
		presence of birds	description	4	Visual observation from plane Incidental reports	NA	NA	NS	2	
		heading	compass points or relative to land or degrees true	159	Visual observation from plane Incidental reports	NA	NA	NS	1,2 Note 17	
		orientation to others	description	1	Visual observation from plane	NA	NA	NS	2	
		orientation to vessel	diagram	4	Visual observation from plane	NA	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0001 Cont'd		orientation to ice edge	description or diagram	14	Visual observation from plane	NA	NA	NS	2,4	
		distance between individuals	whale lengths	1	Visual observation from plane	NA	NA	NS	3	
		position in water	description	6	Visual observation from plane	NA	NA	NS	2	
		disturbing mud	description	3	Visual observation from plane	NA	NA	NS	2	
		splashing	presence or relative or whales	6	Visual observation from plane	NA	NA	NS	2	
		head slamming	whales	1	Visual observation from plane	NA	NA	NS	2	
		spy-hopping	whales	1	Visual observation from plane	NA	NA	NS	2	
		swimming in circles	description	1	Visual observation from plane	NA	NA	NS	2	
		dive characteristics	description	2	Visual observation from plane	NA	NA	NS	2	
82-0007	WW	# landed	whales/area/day	35	Field examination Hunters' interviews	NA	NA	NS	2,4	
		# struck and lost	NS	19	Hunters' interviews	NA	NA	NS	2	
		identification	species	A	Field examination Hunters' interviews Lab examination NS	NA	NA	NA	NA	
		total length	cm	104	Field examination	NA	NA	NS	4	
		# of dentine layers	NS	61	Lab examination	NA	NA	NS	2 Note 9	
		genital structure	male or female	99	Field examination Hunters' interviews	NA	NA	NS	2 Note 9	
		gonad length	NS	42	Lab examination	Frozen	NA	NS	2	
		gonad width	NS	42	Lab examination	Frozen	NA	NS	2	
		gonad depth	NS	42	Lab examination	Frozen	NA	NS	2	
		gonad weight	NS	42	Lab examination	Frozen	NA	NS	2	
		gonad volume	NS	42	Lab examination	Frozen	NA	NS	2	
		sperm present	NS	NS	NS	Frozen	NA	NS	2 Note 9	
		spermatogenesis stages	NS	NS	NS	Frozen	NA	NS	2 Note 9	
		corpora lutea #	NS	NS	NS	Frozen	NA	NS	2 Note 9	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0007 Cont'd		corpora albicantia #	NS	NS	NS	Frozen	NA	NS	2 Note 9	
		fetus present	presence	1	NS	Frozen	NA	NS	2	
		fetus length	cm	1	NS	Frozen	NA	NS	2 Note 9	
		stomach contents	NS	3	NS	NS	NA	NS	2	
82-0008	BW	# seen/location	whales/1' lat. & 1' long.	NS	RAS; Islander; 152-518 m; 148-185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS	Videotapes	NA	Distances usually accurate within 1.8 km for sightings from plane	2,3	
		# of calves	calves or young of year	16	RAS; Islander; 152-518 m; 148-185 km/h; NS	Videotapes	NA	NS	2,4	
		# /group	whales/group	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		# /distance from aircraft	whales/altitude in m	F	RAS; Islander; 152-518 m; 148-185 km/h; NS & radar altimeter Experimental trials	Videotapes	NA	NS	2,3	
		# /distance from vessel	whales/km	F	RAS; Islander; 152-518 m; 148-185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS Experimental trials	Videotapes	NA	NS	2,3	
		identification	species	A	Visual observation from plane Visual observation from vessel Hydroacoustics	NA	NA	NA	NA	
		colour pattern	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		scar pattern	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		defecating	defecations	1	Visual observation from plane	Videotapes	NA	NS	4	
		heading	degrees true	F	Visual observation from plane	Videotapes	NA	NS	2	
		distance/time	relative	F	Visual observation from plane	Videotapes	NA	NS	1,3 Note 4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0008 Cont'd		distance between tail beats	fluke tracks/whale length	NS	Visual observation from plane	NS	NA	NS	2 Note 9	
		dive time	0.01 minutes	141	Visual observation from plane Visual observation from vessel	NS	NA	NS	1,2,4 Note 8	Note 19
		surface time	0.01 minutes	163	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	Note 19
		time between blows	sec.	1483	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	Note 19
		# blows/surfacing	blows/surfacing	135	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	Note 19
		# underwater blows	blows	6	Visual observation from plane	Videotapes	NA	NS	4	
		chases	chases	4	Visual observation from plane	Videotapes	NA	NS	4	
		orientation to others	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		orientation to vessel	clock-face coordinates or diagram	138	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	Note 19
		orientation to wind rows	description	1	Visual observation from plane	Videotapes	NA	NS	4	
		synchrony among animals	heading of whales in area	R	Visual observation from plane	Videotapes	NA	NS	4	
		distance between individuals	m	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		position in water	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		breaching	breaches	8	Visual observation from plane	Videotapes	NA	NS	4	
		tail slapping	tail slaps	17	Visual observation from plane	Videotapes	NA	NS	4	Note 19
		flipper slapping	flipper slaps	12	Visual observation from plane	Videotapes	NA	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0008 Cont'd		mouth open	relative angle of jaw	9	Visual observation from plane	Videotapes	NA	NS	2,4	
		forward lunges	lunges	3	Visual observation from plane	Videotapes	NA	NS	4	
		rolling on side	rolls	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		dive characteristics	pre-dive flexes & back arches & flukes out of water & tail raised	132	Visual observation from plane	Videotapes	NA	NS	4	
		turning at surface	surfacings or degrees/turn	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		log lifting	lifts	30	Visual observation from plane	Videotapes	NA	NS	4	
		log pushing	pushes	34	Visual observation from plane	Videotapes	NA	NS	4	
		log clasping	clasps	11	Visual observation from plane	Videotapes	NA	NS	4	
		rolling log along body	description	6	Visual observation from plane	Videotapes	NA	NS	4	
		nursing	description & nursing dives	16	Visual observation from plane	Videotapes	NA	NS	4	
		# calls/whales-hour	calls/type/whales × minutes	30.6 hours	Sonobuoy AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C analyzer & Tektronix 513 memory oscilloscope	Ranges given for several sightings: 1-3, 4-5, 5-7, 6-8, & 8-10 whales Precision for # of calls: 3%	1,4	
		# calls/type/time	calls/type/minute	30.6 hours	Sonobuoy AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C analyzer & Tektronix 513 memory oscilloscope	Precision for # of calls: 3%	4	
		call frequency spectrum	Hz	5160 calls	Sonobuoy AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C analyzer & Tektronix 513 memory oscilloscope	plus or minus 10 Hz	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0008 Cont'd		call duration	0.1 sec.	5160 calls	Sonobuoy AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C analyzer & Tektronix 513 memory oscilloscope	plus or minus 0.1 sec.	4	
		call intensity	loud or faint	5160 calls	Sonobuoy AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C analyzer & Tektronix 513 memory oscilloscope	Precision for # of calls and # of loud calls: 3%	3	
		pulse rate	pulses/sec.	1 call	Sonobuoy AN/SSQ-57A & Sony ICF-2001 receivers & Sony TC-D5M cassette recorder	Audiotapes	Spectral Dynamics SD301C analyzer & Tektronix 513 memory oscilloscope	NS	2 Note 5	
	GW	# seen/location	whales/1' lat. & 1' long.	1	RAS; Islander; 152-518 m; 148-185 km/h; NS	NS	NA	Distances usually accurate within 1.8 km	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		mud coming from mouth	description	1	Visual observation from plane	NA	NA	NS	4	
		distance between individuals	m to closest bowhead	1	Visual observation from plane	Videotapes?	NA	NS	2	
	WW	# seen/location	whales/1' lat. & 1' long.	1	RAS; Islander; 152-518 m; 148-185 km/h; NS	NS	NA	Distances usually accurate within 1.8 km	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		distance between individuals	km to closest bowhead at surface	1	Visual observation from plane	Videotapes?	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0009	BW	# seen/location	whales/elapsed time, 0.1' lat. & 0.1' long.	30	RAS; Twin Otter; 152 m; 200 km/h; 2.0 km	Ektachrome 200 6x7 cm photographs	NA	NS	4	Note 15
		# /aerial transect line	whales/line	36 lines	SAS; Twin Otter; 152 m; 200 km/h; 2.0 km	Ektachrome 200 6x7 cm photographs	NA	NS	4	Notes 13,15
		# of calves	calves or yearlings or length on photograph in 0.01 mm	42	RAS; Twin Otter; 152 m; 200 km/h; 2.0 km Lab examination of aerial photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	Precision of measurements from photographs usually less than 1%	2,4	Note 19
		# /distance from aircraft	whales/degrees from horizontal, altitude in m	F	RAS; Twin Otter; 152 m; 200 km/h; 2.0 km & inclinometer readings or radar altimeter	NA	NA	NS	3	
		identification	species	A	Visual observation from plane Lab examination of photographs	NA	NA	NA	NA	
		total length	0.01 mm	436	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	Precision: plus or minus 1.42%	1,4 Note 8	
		tail width	0.01 mm	288	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	Precision: plus or minus 1.54%	1,4 Note 8	
		snout-to-blowhole length	0.01 mm	122	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	Precision: plus or minus 1.72%	1,4 Note 8	
		colour pattern	description	206	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0009 Cont'd		scar pattern	description	206	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	NS	2,4	
		heading	compass points	NS	NS	NA	NA	NS	2	
		minimum distance/time	km/h	14	Lab examination of photographs & sightings during RAS; Twin Otter; 152 m; 200 km/h; 2.0 km	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	NS	4	
		orientation to others	diagram	NS	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	NS	2,4	
		distance between individuals	whale lengths	NS	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	NS	2	
		position in water	description	NS	Lab examination of photographs	Ektachrome 200 6x7 cm photographs	Zeiss binocular dissecting microscope with 16-32X magnification	NS	2	
82-0010	BW	# /aerial transect line	whales/line	60 lines	SAS; Twin Otter; 152-305 m; 200 km/h; 1.6 km	NA	NA	NS	3	Note 15
		# of calves	calves	10	SAS; Twin Otter; 152-305 m; 200 km/h; 1.6 km	NA	NA	NS	2	
		# /group	whales/group	120	Visual observation from plane	NA	NA	NS	3,4	
		# /distance from aircraft	whales/degrees from horizontal	103	SAS; Twin Otter; 152-305 m; 200 km/h; 1.6 km & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0010 Cont'd		overall colour	hues	R	Visual observation from plane	NA	NA	NS	2	
		colour pattern	description	F	Visual observation from plane	NA	NA	NS	2	
		presence of birds	description	F	Visual observation from plane	NA	NA	NS	2	
		mud coming from mouth	presence	2	Visual observation from plane	NA	NA	NS	2	
		heading	compass points	87	Visual observation from plane	NA	NA	NS	2	
		distance/time	relative	F	Visual observation from plane	NA	NA	NS	1 Note 4	
		orientation to others	description	F	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	relative or m	NS	Visual observation from plane	NA	NA	NS	2,3	
		position in water	description	F	Visual observation from plane	NA	NA	NS	2	
		mouth open	presence	F	Visual observation from plane	NA	NA	NS	2	
		turning at surface	description	1	Visual observation from plane	NA	NA	NS	2	
	WW	# /aerial transect line	whales/line	60 lines	SAS; Twin Otter; 152-305 m; 200 km/h; 1.6 km	NA	NA	NS	3	Note 15
		# of calves	calves or juveniles	15	SAS; Twin Otter; 152-305 m; 200 km/h; 1.6 km	NA	NA	NS	2	
		# /group	whales/group	42	Visual observation from plane	NA	NA	NS	3	
		# /distance from aircraft	whales/degrees from horizontal	NS	SAS; Twin Otter; 152-305 m; 200 km/h; 1.6 km & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	38	Visual observation from plane	NA	NA	NS	2	
82-0011	WW	# /aerial transect line	whales/line	59 lines	SAS; Cessna 337; 90-152 m; 258 km/h; 0.8 km	NA	NA	NS	3	
		# /group	whales/group	8	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0011 Cont'd		heading	compass points	3	Visual observation from plane	NA	NA	NS	2	
82-0029	BW	# seen/location	whales/general, 1' lat. & 1' long.	13	Incidental reports Vessel watch	NA	NA	NS	2	
		# /group	whales/group	1	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/miles	1	Vessel watch	NA	NA	NS	2	
		identification	species	A	Incidental reports Visual observation from vessel	NA	NA	NA	NA	
		heading	compass points or degrees true	4	Incidental reports Vessel watch	NA	NA	NS	2	
	WW	# seen/location	whales/1' lat. & 1' long., general	10	Incidental reports Vessel watch	NA	NA	Range given for 1 sighting: 20-30 whales	2	
		# dead/location	whales/general	1	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/mile	2	Incidental reports Vessel watch	NA	NA	NS	2	
		identification	species	A	Incidental reports Visual observation from vessel	NA	NA	NA	NA	
		heading	compass points	3	Incidental reports Visual observation from vessel	NA	NA	NS	2	
		distance/time	relative	1	Incidental reports	NA	NA	NS	2	
82-0049	BW	# seen/location	whales/0.1' lat. & 0.1' long.	52	RAS; Grumman Goose; 40-458 m; 222-296 km/h; NS	35 mm photographs	NA,NS	Distance precision: 0.37 km	3	
		# of calves	calves	11	RAS; Grumman Goose; 40-458 m; 222-296 km/h; NS	35 mm photographs	NA,NS	NS	2,3	
		# /group	whales/group	52	Visual observation from plane	NS	NA	NS	2	
		# /distance from aircraft	whales/degrees from horizontal	43	RAS; Grumman Goose; 40-458 m; 222-296 km/h; NS & Inclinometer readings	NA	NA	NS	3	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0049 Cont'd		identification	species	A	Visual observation from plane Lab examination of photographs Hydroacoustics NS	NA	NA	NA	NA	
		total length	relative or 0.5 mm	NS	Visual observation from plane Lab examination of photographs	NA,NS	NA,NS	NS	1,3 Note 14	
		overall colour	hues	1	Visual observation from plane	35 mm photographs	NA	NS	2,3	
		mud on skin	presence	1	Visual observation from plane	NS	NA	NS	2	
		clear trail behind whale	presence	NS	Visual observation from plane	NS	NA	NS	2	
		heading	degrees magnetic	36	Visual observation from plane	NA	NA	NS	2	
		distance/time	km/h	F	Visual observation from plane	NA	NA	NS	1,2 Note 14	
		orientation to others	description	5	Visual observation from plane	35 mm photographs	NA	NS	2,4	Note 19
		synchrony among animals	relative times of surfacings or dives	2	Visual observation from plane	NA	NA	NS	3	Note 19
		distance between individuals	whale lengths	NS	NS	35 mm photographs?	NA	NS	2	
		position in water	description	F	Visual observation from plane	35 mm photographs	NA	NS	2,4	
		breaching	presence	1	Visual observation from plane	NS	NA	NS	2 See Appendix	
		tail slapping	whales & time	2	Visual observation from plane	NS	NA	NS	4 See Appendix	
		swimming in circles	description & whales	1	Visual observation from plane	NS	NA	NS	2 See Appendix	
		mouth open	presence	1	Visual observation from plane	NS	NA	NS	2 See Appendix	Note 19
		nursing	presence	1	Visual observation from plane	NS	NA	NS	2 See Appendix	
		# calls/whale-hour	calls/whales x minutes	NS	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & broadband receiver & Nagra IV SJ recorder	Audiotapes	NS	NS	2,3	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
82-0049 Cont'd		# calls/type/time	calls/type/minute	NS	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & broadband receiver & Nagra IV SJ recorder	Audiotapes	NS	NS	2,3	
	WW	# seen/location	whales/0.1' lat. & 0.1' long.	6	RAS; Grumman Goose; 40-458 m; 222-296 km/h; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
83-0024	BW	# seen/location	whales/1' lat. & 1' long.	NS	RAS; Twin Otter, Islander; 305-610 m; 185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS	Videotapes	NA	Distance usually accurate within 1.8 km for sightings from plane	2,3	
		# of calves	calves or subadults	5	RAS; Twin Otter, Islander; 305-610 m; 185 km/h; NS	Videotapes	NA	NS	2,4	Note 19
		# /group	whales/group	F	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	
		# /distance from aircraft	whales/altitude	F	RAS; Twin Otter, Islander; 305-610 m; 185 km/h; NS & radar altimeter Experimental trials	Videotapes	NA	NS	2,3	
		# /distance from vessel	whales/km	F	RAS; Twin Otter, Islander; 305-610 m; 185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS Experimental trials	Videotapes	NA	NS	2,3	
		# /distance from land	whales/km	F	RAS; Twin Otter, Islander; 305-610 m; 185 km/h; NS RVS; 12.5 m fishing boat; NS; NS; NS	Videotapes	NA	NS	2,3	
		identification	species	A	Visual observation from plane Visual observation from vessel Hydroacoustics	NA	NA	NA	NA	
		overall colour	relative	R	Visual observation from plane	Videotapes	NA	NS	2,3	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0024 Cont'd		colour pattern	description	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		scar pattern	description	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		mud coming from mouth	surfacings	19	Visual observation from plane	Videotapes	NA	NS	4	
		defecating	defecations	6	Visual observation from plane	Videotapes	NA	NS	4	
		heading	degrees true	F	Visual observation from plane	Videotapes	NA	NS	2	
		distance/time	relative	F	Visual observation from plane	Videotapes	NA	NS	1,3 Note 4	
		dive time	0.01 minutes	249	Visual observation from plane Visual observation from vessel	NS	NA	NS	1,2,4 Note 8	Note 19
		surface time	0.01 minutes	686	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	Note 19
		time between blows	sec.	2548	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	Note 19
		# blows/surfacing	blows/surfacing	644	Visual observation from plane	Videotapes	NA	NS	2,4	Note 19
		# underwater blows	blows	347	Visual observation from plane	Videotapes	NA	NS	4	
		nudges	nudges	R	Visual observation from plane	Videotapes	NA	NS	2	
		chases	chases	6	Visual observation from plane	Videotapes	NA	NS	2	
		slaps	slaps	9	Visual observation from plane	Videotapes	NA	NS	4	
		orientation to others	description	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		orientation to vessel	clock-face coordinates & diagrams	131	Visual observation from plane Visual observation from vessel	Videotapes	NA	NS	2,4	
		orientation to windrows	description	1	Visual observation from plane	Videotapes	NA	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0024 Cont'd		distance between individuals	whale lengths or m between white whales & bowhead whale	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		position in water	description	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		breaching	breaches/bout, time period	81	Visual observation from plane	Videotapes	NA	NS	4	
		tail slapping	tail slaps/bout, time period	93	Visual observation from plane	Videotapes	NA	NS	4	
		flipper slapping	flipper slaps/bout, time period	51	Visual observation from plane	Videotapes	NA	NS	4	
		spy-hopping	spy-hops	1	Visual observation from plane	Videotapes	NA	NS	4	
		swimming in circles	description	R	Visual observation from plane	Videotapes	NA	NS	2	
		mouth open	presence	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		forward lunges	lunges	R	Visual observation from plane	Videotapes	NA	NS	4	
		rolling on side	rolls	R	Visual observation from plane	Videotapes	NA	NS	2,4	
		dive characteristics	pre-dives flexes & back arches & flukes raised out of water	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		turning at surface	presence/surfacing	F	Visual observation from plane	Videotapes	NA	NS	2,4	
		# calls/whale-hour	calls/type/whales × minutes	182.2 whale-hours, 33.5 hours	Sonobuoy AN/SSQ-57A, AN/SSQ-41B & Sony ICF-2001 receivers & Sony TC-D5M stereo cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer & Tektronix 5111 memory oscilloscope	Ranges given for several sightings: 5-8, 9-11 whales	1,4	
		# calls/type/time	calls/type/minute	182.2 whale-hours, 33.5 hours	Sonobuoy AN/SSQ-57A, AN/SSQ-41B & Sony ICF-2001 receivers & Sony TC-D5M stereo cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer & Tektronix 5111 memory oscilloscope	NS	4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0024 Cont'd		call intensity	loud or faint	1059 calls	Sonobuoy AN/SSQ-57A, AN/SSQ-41B & Sony ICF-2001 receivers & Sony TC-D5M stereo cassette recorder	Audiotapes	Spectral Dynamics SD301C real-time analyzer & Tektronix 5111 memory oscilloscope	NS	3	
	WW	# seen/location	whales/1' lat. & 1' long.	3	RAS; Twin Otter, Islander; 305-610 m; 185 km/h; NS	NA	NA	NS	2	Note 19
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		distance between individuals	m between white whales & bowhead whale	1	Visual observation from plane	Videotapes?	NA	NS	2	
83-0025	WW	# seen/location	whales/elapsed time, 1' lat. & 1' long.	84	RAS; Twin Otter, King Air; 305-455 m; 225 km/h; NS & inclinometer readings Incidental reports	NA	NA	Range given for 1 sighting: 6-12 whales	1,2,3 Note 2	
		# /aerial transect line	whales/line	106 lines	SAS; Twin Otter; 305 m; 190 km/h; 1.6 km	NA	NA	NS	2	Note 15
		# of calves	calves	2	Incidental reports RAS; Twin Otter, King Air; 305-455 m; 225 km/h; NS	NA	NA	NS	1,2 Note 2	
		# /group	relative, whales/pod	69	Incidental reports Visual observation from plane	NA	NA	NS	1,2 Note 2	
		# /distance from aircraft	whales/degrees from horizontal or whales /altitude in feet	NS	RAS; Twin Otter, King Air; 305-455 m; 225 km/h; NS & inclinometer readings Incidental reports	NA	NA	NS	1,3 Note 2	
		# /distance from vessel	whales/miles, m	13	Incidental reports	NA	NA	NS	1,2 Note 2	
		# /distance from land	whales/m	3	Incidental reports	NA	NA	Range given for 1 sighting: 6-12 whales	1,2 Note 2	
		identification	species	A	Visual observation from plane Incidental reports	NA	NA	NA	NA	
		presence of birds	description	5	Visual observation from plane	NA	NA	NS	2	Note 10

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0025 Cont'd		heading	compass points or relative to land	56	Visual observation from plane Incidental reports	NA	NA	NS	2	
		orientation to vessel	description	1	Incidental reports	NA	NA	NS	2	
		orientation to ice edge	description	4	Visual observation from plane	NA	NA	NS	2	
		distance between individuals	relative	1	Visual observation from plane	NA	NA	NS	2	
		dive characteristics	description	5	Visual observation from plane	NA	NA	NS	2	Note 10
83-0026	BW	# seen/location	whales/lat. & long.	NS	RAS; Aerocommander; 152-304 m; 218-261 km/h; NS	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	NA	NS	2	
		# of calves	calves or yearlings or length on photograph	NS	RAS; Aerocommander; 152-304 m; 218-261 km/h; NS Lab examination of photographs	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	Matra Traster Analytical Plotter & A-O Spence dissecting microscope with 25X magnification	Accuracy: 0.47-6.0% for photographs Precision: 0.01 m for photographs	1,2,4 Note 14	
		# /group	whales/distance or relative	NS	Visual observation from plane	NA	NA	NS	2	
		# /distance from aircraft	whales/altitude in m	A	RAS; Aerocommander; 152-304 m; 218-261 km/h; NS & radar altimeter	NA	NA	NS	2,3	
		identification	species	A	Visual observation from plane Lab examination of photographs	NA	NA	NA	NA	
		total length	0.005 or 0.02 or 0.1 mm	197	Visual observation from plane Lab examination of photographs	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	Matra Traster Analytical Plotter & A-O Spence dissecting microscope with 25X magnification	Accuracy: 0.47-6.0% for photographs Precision: 0.01 m for photographs	1,2,4 Note 14	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0026 Cont'd		tail width	0.02 mm	88	Lab examination of photographs	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	Matra Traster Analytical Plotter & A-0 Spence dissecting microscope with 25X magnification	Accuracy: 0.47-6.0% for photographs Precision: 0.01 m for photographs	4	
		snout-to-blowhole length	0.02 mm	106	Lab examination of photographs	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	Matra Traster Analytical Plotter & A-0 Spence dissecting microscope with 25X magnification	Accuracy: 0.47-6.0% for photographs Precision: 0.01 m for photographs	4	
		colour pattern	description	F	Lab examination of photographs	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	Matra Traster Analytical Plotter & A-0 Spence dissecting microscope with 25X magnification	NS	2	
		scar pattern	description	F	Lab examination of photographs	Vericolor III & Ektachrome Professional 35mm & 70mm photographs	Matra Traster Analytical Plotter & A-0 Spence dissecting microscope with 25X magnification	NS	2	
		heading	NS	F	Visual observation from plane	NA	NA	NS	2	
		position in water	depth in 0.5 m	F	Lab examination of photographs in 3-D	Vericolor III 35 mm photographs	Matra Traster Analytical Plotter	NS	2	
	WW	# seen/location	NS	NS	RAS; Aerocommander; 152-304 m; 218-261 km/h; NS	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0027	BW	# seen/location	whales/elapsed time	86	RAS; Twin Otter; 152 m; 185 km/h; 2.0 km	NA	NA	NS	3	
		# /aerial transect line	whales/line	49 lines	SAS; Twin Otter; 152 m; 185 km/h; 2.0 km	NA	NA	NS	3	
		# of calves	calves	1	SAS; Twin Otter; 152 m; 185 km/h; 2.0 km	NA	NA	NS	2	
		# /group	whales/group	96	Visual observation from plane	NA	NA	NS	2	
		# /distance from aircraft	whales/degrees from horizontal	NS	SAS; Twin Otter; 152 m; 185 km/h; 2.0 km & inclinometer readings RAS; Twin Otter; 152 m; 185 km/h; 2.0 km & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane Lab examination of photographs	NA	NA	NA	NA	
		total length	m	20-21	Lab examination of photographs	Photographs	NS	NS	2	
		heading	compass points	27	Visual observation from plane	NA	NA	NS	2	
		distance/time	relative	2	Visual observation from plane	NA	NA	NS	2	
		position in water	description	F	Visual observation from plane	NA	NA	NS	2	
	WW	# seen/location	whales/elapsed time	5	RAS; Twin Otter; 152 m; 185 km/h; 2.0 km	NA	NA	NS	3	
		# /aerial transect line	whales/line	49 lines	SAS; Twin Otter; 152 m; 185 km/h; 2.0 km	NA	NA	NS	3	
		# of calves	neonates or subadults	27	SAS; Twin Otter; 152 m; 185 km/h; 2.0 km	NA	NA	NS	2	
		# /group	whales/group	41	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		overall colour	hues	40	Visual observation from plane	NA	NA	NS	2	
		heading	compass points	5	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0028	BW	# seen/location	whales/0.1' lat. & 0.1' long.	29	RAS; Grumman Goose; 137-458 m; 222-296 km/h; NS	ASA 64 or 200 35 mm photographs	NA	Precision: 0.37 km/h for location	3	
		# of calves	calves	4	RAS; Grumman Goose; 137-458 m; 222-296 km/h; NS	NS	NA	NS	2	
		# /group	whales/group	12	Visual observation from plane	NS	NA	NS	2	
		# /distance from aircraft	whales/degrees from horizontal	10	RAS; Grumman Goose; 137-458 m; 222-296 km/h; NS & inclinometer readings	NA	NA	NS	3	
		identification	species	A	Visual observation from plane Hydroacoustics	NA	NA	NA	NA	
		total length	feet	A	Visual observation from plane	ASA 64 or 200 35 mm photographs	NA	NS	1,2 Note 14	
		overall colour	hues	1	Visual observation from plane	NS	NA	NS	2	
		mud on skin	relative # of whales	1	Visual observation from plane	NA	NA	NS	2	
		heading	degrees magnetic	18	Visual observation from plane	NA	NA	NS	2	
		distance/time	body lengths/time	A	Visual observation from plane	NA	NA	NS	2	
		surface time	relative	2	Visual observation from plane	NA	NA	NS	2	
		# underwater blows	presence or whales	3	Visual observation from plane	NA	NA	NS	3	
		distance between individuals	relative or m	3	Visual observation from plane	NS	NA	NS	2,3	
		position in water	description	3	Visual observation from plane	NS	NA	NS	2	
		breaching	whales	1	Visual observation from plane	NA	NA	NS	4	
		gamming	description	2	Visual observation from plane	NA	NA	NS	4	
		spy-hopping	whales	2	Visual observation from plane	NA	NA	NS	4	
		mouth open	whales	1	Visual observation from plane	NA	NA	NS	2	
		turning at surface	relative # of surfacings	2	Visual observation from plane	NA	NA	NS	2,4	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0028 Cont'd		# calls/whale-hour	calls/whales within 15 km x minutes	109 minutes	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & VHF broad band receiver & Nagra IV SJ recorder	NS	Aurally analyzed	NS	3	
		# calls/type/time	calls/type/minute	109 minutes	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & VHF broad band receiver & Nagra IV SJ recorder	NS	Aurally analyzed	NS	3	
		call duration	0.1 sec.	716 calls	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & VHF broad band receiver & Nagra IV SJ recorder	NS	NS	NS	2	
		call frequency spectrum	Hz	716 calls	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & VHF broad band receiver & Nagra IV SJ recorder	NS	Aurally analyzed	NS	3	
		call intensity	relative	NS	Sonobuoy AN/SSQ-41A, AN/SSQ-41B, AN/SSQ-57A & VHF broad band receiver & Nagra IV SJ recorder	NS	Aurally analyzed	NS	2	
	WW	# seen/location	whales/0.1' lat. & 0.1' long.	13	RAS; Grumman Goose; 137-458 m; 222-296 km/h; NS	NA	NA	NS	2	
		# /group	whales/group	NS	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	degrees magnetic	NS	Visual observation from plane	NA	NA	NS	2	
83-0029	BW	# /aerial transect line	whales/line	64 lines	SAS; Cessna 337; 90-150 m; 258 km/h; 0.8 km	NA	NA	NS	3	Note 13
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
	WW	# /aerial transect line	presence, whales/ line	64 lines	SAS; Cessna 337; 90-150 m; 258 km/h; 0.8 km	NA	NA	NS	2,3	Note 13
		# /group	whales/group	13	Visual observation from plane	NA	NA	NS	2	
		identification	species	A	Visual observation from plane	NA	NA	NA	NA	
		heading	compass points	20	Visual observation from plane	NA	NA	NS	2	

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0030	BW	# seen/location	whales/NS	16	Incidental reports	NA	NA	NS	2	
		# /group	whales/group	16	Incidental reports	NA	NA	NS	2	
		# /distance from vessel	whales/km	NS	Incidental reports	NA	NA	NS	2	
		identification	species	A	Incidental reports	NA	NA	NA	NA	
	WW	# seen/location	whales/general, 1' lat. & 1' long.	5	Incidental reports	NA	NA	NS	2	
		# /group	whales/group	4	Incidental reports	NA	NA	NS	2	
		identification	species	A	Incidental reports	NA	NA	NA	NA	
83-0031	WW	# landed	whales/hunters/day	NS	Field examination	NA	NA	NS	2,4	
		# whales struck and lost	NS	NS	Hunters' interviews	NA	NA	NS	2	
		identification	species	A	Field examination Hunters' interviews Lab examination NC	NA	NA	NA	NA	
		total length	cm	77	Field examination	NA	NA	NS	4	
		flipper length	cm	35	Field examination	NA	NA	NS	2,4	
		flipper width	cm	34	Field examination	NA	NA	NS	4	
		girth behind flippers	cm	16	Field examination	NA	NA	NS	2	
		tail width	cm	19	Field examination	NA	NA	NS	4	
		snout-to-blowhole length	cm	8	Field examination	NA	NA	NS	4	
		snout-to-anus length	cm	5	Field examination	NA	NA	NS	4	
		snout-to-genital slit length	cm	5	Field examination	NA	NA	NS	4	
		snout-to-umbilicus length	cm	2	Field examination	NA	NA	NS	4	
		snout-to-flipper length	cm	3	Field examination	NA	NA	NS	4	
		snout-to-eye length	cm	8	Field examination	NA	NA	NS	4	
		snout-to-ear length	cm	7	Field examination	NA	NA	NS	4	
		# teeth/jaw	teeth/jaw, half jaw	12	Field examination	NA	NA	NS	2,4	
		# of dentine layers	NS	NS	NS	NA	NS	NS	2 Note 9	
		overall colour	hues	84	Field examination	NA	NA	NS	2	
		genital structure	male or female	83	Field examination	NA	NA	NS	4	
		gonad length	mm	NS	Field examination Lab examination	Formalin	NA	NS	4	Note 20

DATA SET I.D.	SPECIES	MEASUREMENT	UNITS	NO. SAMPLES	MATERIALS AND METHODS				RATING	REMARKS
					COLLECTION	STORAGE	ANALYSIS	PRECISION/ ACCURACY		
83-0031 Cont'd		gonad width	mm	NS	Field examination Lab examination	Formalin	NA	NS	4	Note 20
		gonad depth	mm	NS	Field examination Lab examination	Formalin	NA	NS	4	Note 20
		gonad volume	ml	NS	Field examination Lab examination	Formalin	NA	NS	4	Note 20
		gonad weight	g or 0.1 g	NS	Field examination Lab examination	Formalin	NA	NS	4	Note 20
		sperm present	presence	NS	Lab examination	Formalin	NS	NS	2	
		spermatogenesis stages	NS	NS	Lab examination	Formalin	NS	NS	2	
		corpora lutea #	NS	NS	Lab examination	Formalin	NS	NS	2	
		corpora albicantia #	NS	NS	Lab examination	Formalin	NS	NS	2	
		milk present	presence	NS	Field examination	Frozen	NS	NS	2	
		fetus present	presence	NS	Field examination	Formalin	NS	NS	2,4	
		fetus length	NS	NS	Field examination Lab examination	Formalin	NS	NS	2	Note 20
		stomach contents	NS	NS	Lab examination	NS	NS	NS	2	

8.3 DATA INVENTORY TABLE 3: SAMPLING TIMES AND LOCATIONS

Data Inventory Table 3 presents the sampling times and locations, by survey type, for each data set. Data sets are listed in chronological order according to I.D. number. If no information is available on the specific times or locations sampled, the data set is not listed. The contents and abbreviations used in this table are described below.

DATA SET I.D.

Each identification (I.D.) number is unique to a data set; all subsequent references to data sets are by I.D. numbers. The first two digits of the I.D. refer to the last two digits of the year that data collection commenced; the last four digits are assigned to the data set. The subscript$_{18}$ indicates data sets obtained in the 1800s.

SURVEY TYPE

This column indicates the methods used to obtain measurements on whales. Five methods are listed. "Shore Watch" and "Vessel Watch" involve observations from a stationary platform. Three types of surveys from moving platforms are included. Reconnaissance aerial surveys ("RAS") and reconnaissance vessel surveys ("RVS") do not follow a pre-determined geometric search pattern, unlike systematic aerial surveys ("SAS") which do.

TIME SAMPLED

The start and the end dates are given for each survey within each data set. For aerial surveys, the start date and the end date are assumed to be the same, unless available information indicates otherwise. "NS" or not specified indicates substantial doubt as to the date.

Sampling was assumed to be continuous unless indicated otherwise. If aircraft landed in the middle of a survey, for whatever reason, this is indicated. If sampling was not continuous, but the exact sampling schedule was not given, "NS" or not specified is indicated.

GEOGRAPHIC LOCATION

Specific sampling areas are detailed. Readers should refer to the World Aeronautical Charts C-9 and/or C-10 for place names not given in Figure 2.1. Abbreviations used are:

Tuk = Tuktoyaktuk;

- = to;

; = and (if there are no comments in parentheses following the locations which apply to both areas);

& = and (if there is a comment in parentheses which applies to both areas); and,

(see map) = refer to section 9.0.

REMARKS

This column indicates additional information that is known regarding sampling times and/or locations.

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
55-0010	RAS	Mar. 16	Mar. 16	Continuous	Aklavik-Sachs Harbour-Liot Point	
	RAS	July 23	July 23	Continuous	Sachs Harbour-Aklavik	
69-0017	RAS	July 03	July 03	Continuous	Inuvik-Kendall Island-Garry Island-Shallow Bay-Shingle Point-Inuvik	
	Shore Watch	July 06	July 09	NS	Tent Island	
	Shore Watch	July 10	July 17	NS	Kendall Island	
72-0007	NS	July 01	July 01	NS	Shallow Bay-Mackenzie Bay	
	NS	July 03	July 03	NS	Shallow Bay-Mackenzie Bay	
	RAS	July 14	July 14	Continuous	West Mackenzie Bay	
	NS	July 15	July 15	NS	West Mackenzie Bay	
	NS	July 16	July 16	NS	East Mackenzie Bay	
	NS	July 17	July 17	NS	East Mackenzie Bay	
	INCOMPLETE					
72-0016	RAS	July 02	July 02	Continuous	Inuvik-Shallow Bay-Shingle Point-Garry Island-Kendall Island-Pelly Island-Richards Island-Eskimo Lakes-Inuvik	
	RVS	July 10	July 10	Continuous	Kugmallit Bay	
	RVS	July 15	July 15	Continuous	Kugmallit Bay	
	RAS	July 15	July 15	Continuous	Kugmallit Bay	
	RVS	July 16	July 16	Continuous	Kugmallit Bay	
	RAS	July 18	July 18	Continuous	Kugmallit Bay-Shallow Bay-Kugmallit Bay	
	RAS	Sep. 19	Sep. 19	Continuous	Cape Parry-Cape Prince Alfred-Cape Bathurst-134°W longitude-Cape Parry	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
72-0016 Cont'd	RAS	Sep. 21	Sep. 21	Continuous	Inuvik-Mackenzie Bay-Herschel Island -Alaska-Herschel Island	
73-0017	RAS	NS	NS	Continuous	Kugmallit Bay	
73-0018	RAS	July 26	July 26	Continuous	Tuk-Liverpool Bay-Baillie Islands-Franklin Bay-Cape Parry-Cape Bathurst-Cape Dalhousie-McKinley Bay -Tuk	
	RAS	July 27	July 27	Continuous	Tuk-Hendrickson Island-Richards Island-Hooper Island-Pelly Island-Garry Island-Ellice Island-Shallow Bay-Shingle Point-Herschel Island-Tuk	
	RAS	July 28	July 28	Continuous	Tuk-Warren Point-Atkinson Point-Kugmallit Bay-Inuvik	
	RAS	Sep. 19	Sep. 19	Continuous	Tuk-Toker Point-Tuk	
	RAS	Sep. 20	Sep. 20	Continuous	Tuk-Hendrickson Island-Richards Island-Hooper Island-Pelly Island-Garry Island-Ellice Island-Shallow Bay-Shingle Point-Herschel Island-Tuk	
73-0019	RAS	May 26	May 26	Continuous	East Mackenzie Bay-24 miles north of Pelly Island	
	RAS	May 27	May 27	Continuous	Tuk-Herschel Island-25 miles offshore	
	RAS	May 30	May 30	Continuous	Shingle Point-Cape Dalhousie	
	RAS	May 31	May 31	Continuous	40 miles north of Richards Island	
	RAS	June 04	June 04	Continuous	Mackenzie Bay-Herschel Island-35 miles offshore	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
73-0019 Cont'd	RAS	June 04	June 04	Continuous	Kugmallit Bay-50 miles offshore of Tuk Peninsula	
	RAS	June 05	June 05	Continuous	Kugmallit Bay-50 miles offshore of Cape Dalhousie	
	RAS	June 06	June 06	Continuous	30 miles north of Richards Island-Herschel Island	
	RAS	June 17	June 17	Continuous	Kugmallit Bay-along Tuk Peninsula-100 miles offshore of Cape Dalhousie	
	RAS	June 18	June 18	Continuous	Mackenzie Bay	
	RAS	June 18	June 18	Continuous	Mackenzie Bay-Herschel Island-40 miles offshore	
	RAS	June 19	June 19	Continuous	Shallow Bay-Mackenzie Bay-Herschel Island	
	RAS	June 20	June 20	Continuous	Tuk-Cape Dalhousie-90 miles north of Atkinson Point	
	RAS	June 20	June 20	Continuous	80 miles north of Herschel Island-East Mackenzie Bay	
	RAS	June 21	June 21	Continuous	Mackenzie Bay-Shallow Bay-edge of lead-Kugmallit Bay	
	RAS	June 23	June 23	Continuous	Mackenzie Bay	
	RAS	June 24	June 24	Continuous	South edge of lead north of Richards Island-Cape Dalhousie	
	RAS	June 24	June 24	Continuous	Mackenzie Bay-Shallow Bay-Kay Point	
	RAS	June 25	June 25	Continuous	Mackenzie Bay-Shallow Bay	
	RAS	June 26	June 26	Continuous	Mackenzie Bay-Kugmallit Bay	
	RAS	June 26	June 26	Continuous	Mackenzie Bay-Shallow Bay	
	RAS	June 27	June 27	Continuous	Mackenzie Bay-Shallow Bay-Herschel Island	
	SAS	June 27	June 27	Continuous	Kugmallit Bay	
	SAS	June 28	June 28	Continuous	East Mackenzie Bay; Shallow Bay	
	RAS	June 28	June 28	Continuous	West Mackenzie Bay	
	RAS	June 29	June 29	Continuous	Kugmallit Bay-Mackenzie Bay	
	SAS	June 29	June 29	Continuous	Shallow Bay	
	RAS	June 30	June 30	Continuous	Shallow Bay-West Mackenzie Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
73-0019 Cont'd	RAS	June 30	June 30	Continuous	20 miles north of Hooper Island-20 miles north of Herschel Island	
	SAS	June 30	June 30	Continuous	Kugmallit Bay; East Mackenzie Bay	
	RAS	July 01	July 01	Continuous	Kugmallit Bay-Mackenzie Bay	
	RAS	July 01	July 01	Continuous	Tuk Peninsula coastline-Cape Dalhousie	
	SAS	July 02	July 02	Continuous	Kugmallit Bay	
	RAS	July 02	July 02	Continuous	Mackenzie Bay coastline	
	SAS	July 02	July 02	Continuous	Shallow Bay	
	SAS	July 03	July 03	Continuous	East Mackenzie Bay; Shallow Bay	
	RAS	July 04	July 04	Continuous	Offshore 35 miles north of Pullen Island-35 miles northwest of Herschel Island	
	SAS	July 04	July 04	Continuous	Kugmallit Bay	
	RAS	July 05	July 05	Continuous	Kugmallit Bay	
	RAS	July 05	July 05	Continuous	Tuk Peninsula coastline-Cape Dalhousie	
	RAS	July 05	July 05	Continuous	Mackenzie Bay	
	RAS	July 06	July 06	Continuous	West Mackenzie Bay-Shallow Bay-East Mackenzie Bay	
	RAS	July 06	July 06	Continuous	East Mackenzie Bay-Shallow Bay-Herschel Island	
	RAS	July 07	July 07	Continuous	East Mackenzie Bay	
	SAS	July 07	July 07	Continuous	Kugmallit Bay	
	RAS	July 08	July 08	Continuous	Kugmallit Bay	
	RAS	July 09	July 09	Continuous	East Mackenzie Bay-Kugmallit Bay-Tuk Peninsula coastline	
	RAS	July 10	July 10	Continuous	East Mackenzie Bay-Shallow Bay-King Point	
	SAS	July 11	July 11	Continuous	Kugmallit Bay	
	RAS	July 13	July 13	Continuous	East Mackenzie Bay-Cape Dalhousie-Herschel Island	
	RAS	July 14	July 14	Continuous	East Mackenzie Bay-Herschel Island	
	SAS	July 15	July 15	Continuous	Kugmallit Bay; East Mackenzie Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
73-0019 Cont'd	RAS	July 15	July 15	Continuous	Kugmallit Bay-East Mackenzie Bay	
	RAS	July 16	July 16	Continuous	Kugmallit Bay-East Mackenzie Bay	
	RAS	July 16	July 16	Continuous	East Mackenzie Bay-Garry Island	
	RAS	July 17	July 17	Continuous	East Mackenzie Bay-Shallow Bay-Kugmallit Bay	
	RAS	July 18	July 18	Continuous	Mackenzie Bay-Kugmallit Bay	
	RAS	July 19	July 19	Continuous	Herschel Island-Cape Dalhousie-80 miles offshore	
	RAS	July 20	July 20	Continuous	Mackenzie Bay-Kugmallit Bay	
	RAS	July 22	July 22	Continuous	Mackenzie Bay-Kugmallit Bay	
	RAS	July 26	July 26	Continuous	Mackenzie Bay-Kugmallit Bay	
	RAS	July 27	July 27	Continuous	East Mackenzie Bay-Kugmallit Bay	
	RAS	July 31	July 31	Continuous	Kugmallit Bay-Herschel Island-15 miles offshore	
	RAS	Aug. 03	Aug. 03	Continuous	Kugmallit Bay	
	RAS	Aug. 04	Aug. 04	Continuous	Kugmallit Bay-Mackenzie Bay-Shallow Bay	
	RAS	Aug. 04	Aug. 04	Continuous	East Mackenzie Bay-Kugmallit Bay	
	RAS	Aug. 05	Aug. 05	Continuous	Cape Dalhousie-Herschel Island-60 miles offshore	
	RAS	Aug. 09	Aug. 09	Continuous	Tuk-Herschel Island	
	RAS	Aug. 11	Aug. 11	Continuous	30 miles west of Herschel Island-Cape Dalhousie-75 miles offshore	
73-0021	Shore Watch	Aug. 25	Sep. 29	Continuous from 0.5 hours before sunrise to 0.5 hours after sunset	2 miles south of Shingle Point	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
73-0021 Cont'd	Shore Watch	Aug. 25	Sep. 29	Continuous from 0.5 hours before sunrise to 0.5 hours after sunset	Komakuk	
	RAS	Aug. 25	Aug. 25	Continuous	Inuvik-Shallow Bay-along Yukon coast -Phillips Bay	
	RAS	Aug. 29	Aug. 29	Continuous	Shallow Bay-along Yukon coast-Alaska	
	RAS	Sep. 01	Sep. 01	Continuous	Johnson Bay-along coast-Russell Inlet	
	SAS	Sep. 02	Sep. 02	Continuous	Beaufort coast	
	SAS	Sep. 03	Sep. 03	Continuous	Beaufort coast	
	SAS	Sep. 04	Sep. 04	Continuous	Beaufort coast	
	SAS	Sep. 05	Sep. 05	Continuous	Beaufort coast	
	SAS	Sep. 06	Sep. 06	Continuous	Beaufort coast	
	SAS	Sep. 09	Sep. 09	Continuous	Beaufort coast	
	SAS	Sep. 11	Sep. 11	Continuous	Beaufort coast	
	SAS	Sep. 12	Sep. 12	Continuous	Beaufort coast	
	SAS	Sep. 13	Sep. 13	Continuous	Beaufort coast	
	SAS	Sep. 18	Sep. 18	Continuous	Beaufort coast	
	SAS	Sep. 22	Sep. 22	Continuous	Beaufort coast	
	SAS	Sep. 23	Sep. 23	Continuous	Beaufort coast	
	SAS	Sep. 24	Sep. 24	Continuous	Beaufort coast	
	SAS	Sep. 25	Sep. 25	Continuous	Beaufort coast	
	SAS	Sep. 29	Sep. 29	Continuous	Beaufort coast	
74-0029	SAS	June 19	June 19	Continuous	2 lines north of Richards Island & 4 westernmost lines north of Tuk Peninsula (see map)	
	SAS	June 20	June 20	Continuous	4 lines north of Richards Island & 5 easternmost lines north of Tuk Peninsula (see map)	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
74-0029 Cont'd	SAS	June 21	June 21	Continuous	5 westernmost lines north of Yukon coast & line through Kugmallit Bay & line north of Atkinson Point (see map)	
	SAS	June 22	June 22	Continuous	6 easternmost lines north of Yukon coast (see map)	
	SAS	June 23	June 23	Continuous	1 line in eastern part of Franklin Bay (see map)	
	SAS	June 24	June 24	Continuous	6 lines in Amundsen Gulf, including 4 easternmost ones & 2 of 3 southernmost lines along Banks Island Shelf (see map)	
	SAS	June 25	June 25	Continuous	3 lines along Banks Island Shelf (see map)	
	SAS	June 26	June 26	Continuous	Lines north of Liverpool Bay & lines north of Bathurst Peninsula & southernmost line along Banks Island Shelf (see map)	
	SAS	June 27	June 27	Continuous	10 northernmost lines along Banks Island Shelf (see map)	
	SAS	June 28	June 28	Continuous	2 lines north of Parry Peninsula (see map)	
74-0030	RAS	July 15	July 15	Continuous	Tuk-north of Toker Point-north of Pullen Island-north of Hooper Island -Sabine Point-Shallow Bay-Olivier Islands-East Mackenzie Bay-Tuk	
	RAS	July 17	July 17	Continuous	Tuk-along shore of Tuk Peninsula-Liverpool Bay	
	RAS	July 17	July 17	Continuous	Tuk-Hendrickson Island-north of Toker Point-Tuk	
	RAS	July 22	July 22	Continuous	Tuk-Cape Dalhousie-Baillie Islands-Horton River mouth-Tuk	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
74-0030 Cont'd	RAS	July 23	July 23	Continuous	Stokes Point-Shallow Bay-Olivier Islands-Garry Island-Kendall Island-Hooper Island-Pullen Island-west of Hendrickson Island-Tuk	
	RAS	July 25	July 25	Continuous	Tuk-Hooper Island-Pelly Island-Garry Island-Kendall Island-Herschel Island-Shoalwater Bay-Kittigazuit-Tuk	
	RAS	July 26	July 26	Continuous	Tuk-ice edge-Atkinson Point-McKinley Bay-Liverpool Bay-Baillie Islands-Cape Bathurst-Horton River mouth-Tuk	
	RAS	July 28	July 28	Continuous	Tuk-Atkinson Point-Tuk	
	RAS	July 28	July 28	Continuous	Tuk-Hooper Island-Herschel Island-Tuk	
	RAS	July 29	July 29	Continuous	Tuk-95 miles north of Shingle Point-Garry Island-Kendall Island-Tuk	
	RAS	July 30	July 31	Put down for 18 hours near Hooper Island	Tuk-95 miles north of Shingle Point-Hooper Island-Tuk	
	RAS	Sep. 11	Sep. 12	Put down for 4 hours at Stanton and then at Nicholson Point	Tuk-along Tuk Peninsula-Atkinson Point-Nicholson Point-Baillie Islands-Cape Parry-Stanton-Nicholson Point-Tuk	
	RAS	Sep. 12	Sep. 12	Continuous	Tuk-Atkinson Point-Tuk	
	RAS	Sep. 13	Sep. 13	Continuous	Tuk-69°45'N, 132°W-Tuk	
74-0031	RAS	Apr. 21	Apr. 21	Continuous	Along Yukon coast-outer edge of Mackenzie Estuary-Tuk	
	RAS	Apr. 22	Apr. 22	Continuous	Tuk-along Tuk Peninsula-Nicholson Point	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
74-0031 Cont'd	RAS	Apr. 24	Apr. 24	Continuous	Nicholson Point-Baillie Islands-Franklin Bay-Cape Parry-Sachs Harbour-127°30'W-Sachs Harbour-Cape Brown	
	RAS	May 01	May 01	Continuous	Along Yukon coast-outer edge of Mackenzie Estuary-Tuk	
	RAS	May 04	May 04	Continuous	Tuk-along Tuk Peninsula-north of Baillie Islands-north of Cape Parry	
	RAS	May 05	May 05	Continuous	Along west coast of Banks Island-Sachs Harbour-Cape Dalhousie	
	RAS	May 13	May 13	Continuous	Along Yukon coast-outer edge of western half of Mackenzie Estuary	
	RAS	May 14	May 14	Continuous	Tuk-along Tuk Peninsula-north of Baillie Islands-Franklin Bay-Cape Parry	
	RAS	May 15	May 15	Continuous	Cape Dalhousie-Sachs Harbour-west coast of Banks Island-Sachs Harbour-Cape Dalhousie	
	RAS	May 21	May 21	Continuous	North of Herschel Island-along Yukon coast-outer edge of Mackenzie Estuary-Tuk	
	RAS	May 24	May 24	Continuous	Tuk-along Tuk Peninsula-north of Baillie Islands-Cape Parry	
	RAS	May 27	May 27	Continuous	Cape Dalhousie-Sachs Harbour-half way up Banks Island Shelf	
	RAS	May 29	May 29	Continuous	Along 70°N-Herschel Island-along 70°N-Tuk	
	RAS	May 30	May 30	Continuous	Tuk-70°40'N, 133°01'W-north of Baillie Islands-Cape Parry	
	RAS	May 31	May 31	Continuous	Cape Dalhousie-Sachs Harbour-Banks Island Shelf	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
74-0031 Cont'd	SAS	June 06	June 08	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Canada Basin & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	June 20	June 23	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Canada Basin & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	June 25	June 26	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Kugmallit Bay	
	SAS	July 03	July 07	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Canada Basin & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	July 15	July 18	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Canada Basin & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	July 23	July 24	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Canada Basin & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	Aug. 13	Aug. 22	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	Aug. 25	Aug. 30	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	Sep. 10	Sep. 10	Continuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
74-0031 Cont'd	SAS	Sep. 26	Sep. 28	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Amundsen Gulf & Banks Island Shelf & Kugmallit Bay & Liverpool Bay	
	SAS	Oct. 06	Oct. 06	Continuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Kugmallit Bay	
	SAS	Oct. 14	Oct. 18	Discontinuous	Beaufort coast & Mackenzie Shelf & Continental Slope & Amundsen Gulf & Kugmallit Bay & Liverpool Bay	
74-0032	RAS	Aug. 24	Aug. 24	Continuous	Shingle Point-Alaska	
	RAS	Aug. 29	Aug. 29	Continuous	Shingle Point-Alaska	
	SAS	Aug. 29	Aug. 29	Continuous	Beaufort coast	
	SAS	Aug. 30	Aug. 30	Continuous	Beaufort coast	
	SAS	Aug. 31	Aug. 31	Continuous	Beaufort coast	
	SAS	Sep. 05	Sep. 05	Continuous	Beaufort coast	
	SAS	Sep. 06	Sep. 06	Continuous	Beaufort coast	
	SAS	Sep. 11	Sep. 11	Continuous	Beaufort coast	
	SAS	Sep. 15	Sep. 15	Continuous	Beaufort coast	
	SAS	Sep. 16	Sep. 16	Continuous	Beaufort coast	
	SAS	Sep. 23	Sep. 23	Continuous	Beaufort coast	
	SAS	Sep. 25	Sep. 25	Continuous	Beaufort coast	
	SAS	Sep. 28	Sep. 28	Continuous	Beaufort coast	
	SAS	Sep. 30	Sep. 30	Continuous	Beaufort coast	
74-0033	RAS	June 19	June 19	Continuous	North of Tuk Peninsula	
	RAS	June 21	June 21	Continuous	Kugmallit Bay-Shallow Bay-Mackenzie Bay-Herschel Island	
	RAS	June 26	June 26	Continuous	Herschel Island-Tuk Peninsula	
	RAS	July 03	July 03	Continuous	Herschel Island-Tuk Peninsula-Mackenzie Bay	
	RAS	July 05	July 05	Continuous	Tuk-Banks Island-Cape Parry	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
74-0033 Cont'd	RAS	July 11	July 11	Continuous	Shallow Bay-Herschel Island-north 150 miles-Pullen Island	
	RAS	Sep. 07	Sep. 07	Continuous	Shallow Bay-Herschel Island-north 75 miles-Barrier Islands-Kugmallit Bay	
	RAS	Sep. 08	Sep. 08	Continuous	Kugmallit Bay-Tuk Peninsula	
74-0045	SAS	June 12	June 12	Continuous	7 lines from west of Pullen Island-Hutchison Bay (see map)	
	SAS	June 13	June 13	Continuous	7 lines north of eastern end of Tuk Peninsula (see map)	
	SAS	June 14	June 14	Continuous	4 lines north of western half of Richards Island (see map)	
	SAS	June 15	June 15	Continuous	3 westernmost lines (see map)	
	SAS	June 16	June 16	Continuous	8 lines from Herschel Island-Yukon/NWT border (see map)	
	SAS	June 17	June 17	Continuous	5 lines from Nicholson Point-western half of Franklin Bay (see map)	
	SAS	June 18	June 18	Continuous	3 lines in eastern half of Franklin Bay & 2 easternmost lines (see map)	
	SAS	June 19	June 19	Continuous	17 lines along Banks Island Shelf & 1 line north of Darnley Bay (see map)	
	SAS	June 20	June 20	Continuous	3 lines north of Parry Peninsula (see map)	
75-0046	SAS	July 08	July 08	Continuous	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 10	July 10	Continuous	Mackenzie Bay; East Mackenzie Bay	
	RAS	July 10	July 10	Continuous	East Mackenzie Bay	
	SAS	July 11	July 11	Continuous	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 13	July 13	Continuous	Mackenzie Bay; East Mackenzie Bay	
	RAS	July 13	July 13	Continuous	East Mackenzie Bay	
	SAS	July 14	July 14	Continuous	East Mackenzie Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
75-0046 Cont'd	RAS	July 14	July 14	Continuous	East Mackenzie Bay	
	SAS	July 15	July 15	Continuous	East Mackenzie Bay	
	SAS	July 17	July 17	Put down for approximately 3 hours	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 18	July 18	Continuous	Mackenzie Bay; East Mackenzie Bay; Kugmallit Bay	
	RAS	July 19	July 19	Continuous	East Mackenzie Bay	
	SAS	July 21	July 21	Continuous	East Mackenzie Bay	
	RAS	July 21	July 21	Continuous	Yukon coast	
	RAS	Aug. 10	Aug. 10	Continuous	East Mackenzie Bay	
75-0047	RAS	July 12	July 12	Continuous	Tuk-Komakuk-Tuk	
	RAS	July 12	July 12	Continuous	Tuk-Cape Parry-Horton River-Tuk	
	RAS	July 14	July 14	Continuous	Tuk-Atkinson Point-Tuk	
	RAS	July 17	July 17	Continuous	Tuk-Eskimo Lakes-Kugmallit Bay-Tuk	
	RAS	July 18	July 18	Continuous	Tuk-Whitefish Station-Barrier Islands-Shallow Bay-Herschel Island-Komakuk-Herschel Island-Tuk	
	RAS	July 19	July 19	Continuous	Tuk-Eskimo Lakes-Tuk	
	RAS	July 20	July 20	Continuous	Tuk-Eskimo Lakes-Franklin Bay-Baillie Islands-Franklin Bay-Tuk	
	RAS	July 21	July 21	Continuous	Tuk-Kugmallit Bay-Mackenzie Bay-East Mackenzie Bay	
	RAS	July 22	July 22	Continuous	Tuk-Hendrickson Island-Richards Island-Ellice Island-Herschel Island-Komakuk-Kay Point-Shallow Bay-Tuk	
	RAS	July 23	July 23	Continuous	Tuk-Warren Point-Atkinson Point-McKinley Bay-Eskimo Lakes-Tuk	
	RAS	July 24	July 24	Continuous	Tuk-Kugmallit Bay-Pullen Island-Barrier Islands-Mackenzie Bay	
	RAS	July 26	July 26	Continuous	Tuk-Eskimo Lakes-Baillie Islands-Franklin Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
75-0047 Cont'd	RAS	July 28	July 28	Continuous	Warren Point-Atkinson Point-Tuk	
75-0048	RAS	May 14	May 14	Continuous	Komakuk-Alaska-Yukon border-north 250 km-north of Herschel Island-Komakuk	
	RAS	May 28	May 29	Continuous	Komakuk-northeast 210 km-north of Herschel Island-Komakuk	
	RAS	June 05	June 05	Continuous	Komakuk-Clarence Lagoon-north 50 km-90 km northeast Herschel Island-Herschel Island-Malcolm River	
	RAS	June 15	June 16	Continuous	Komakuk-northwest 60 km-east 150 km-north 80 km-Mackenzie Bay-Herschel Island-west 50 km	
	RAS	June 26	June 26	Continuous	Komakuk-Clarence Lagoon-north 60 km-Komakuk-Herschel Island-north 50 km-west 60 km-Komakuk	
	RAS	July 03	July 04	Continuous	Clarence Lagoon-Herschel Island-north 50 km-west 90 km-Komakuk	
	RAS	July 09	July 10	Continuous	Komakuk-Clarence Lagoon-north 160 km east 80 km-Richards Island	
75-0049	RAS	Aug. 25	Aug. 25	Continuous	Shingle Point-Alaska	
	SAS	Aug. 28	Aug. 28	Continuous	Beaufort coast	
	RAS	Sep. 04	Sep. 04	Continuous	Shingle Point-Phillips Bay	
	RAS	Sep. 08	Sep. 08	Continuous	Shingle Point-Alaska	
	SAS	Sep. 08	Sep. 08	Continuous	Beaufort coast	
	SAS	Sep. 13	Sep. 13	Continuous	Beaufort coast	
	SAS	Sep. 14	Sep. 14	Continuous	Beaufort coast	
	SAS	Sep. 17	Sep. 17	Continuous	Beaufort coast	
	SAS	Sep. 18	Sep. 18	Continuous	Beaufort coast	
	SAS	Sep. 23	Sep. 23	Continuous	Beaufort coast	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STUP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
75-0050	RAS	June 23	June 23	Put down at Sachs Harbour for 1.5 hours	Bar C-north of Shingle Point-north of Pullen Island-Warren Point-Baillie Islands-Cape Parry-Nelson Head-Sachs Harbour-Bar C	
	RAS	June 26	June 26	Put down at Komakuk for 0.5 hours	Bar C-Shallow Bay-Garry Island-Shingle Point-Herschel Island-Komakuk-Barrier Islands-Bar C	
	RAS	June 29	June 30	Put down at Komakuk for 1 hour	Bar C-65 miles west of Komakuk-north of Barrier Islands-Cape Dalhousie-Bar C	
	RAS	July 01	July 01	Put down at West Whitefish	Langley Island-along Yukon coast-Blow River-Langley Island	
	RAS	July 02	July 02	Put down at West Whitefish	Bar C-Shallow Bay-Shingle Point-Langley Island	
	RAS	July 03	July 03	Continuous	Inuvik-Kugmallit Bay-Shallow Bay-Mackenzie Bay-Barrier Islands-Bar C	
	SAS	July 04	July 04	Continuous	Kugmallit Bay; East Mackenzie Bay; Mackenzie Bay	
	SAS	July 05	July 05	Continuous	Mackenzie Bay	
	SAS	July 06	July 06	Continuous	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 07	July 07	Continuous	Mackenzie Bay; East Mackenzie Bay; Kugmallit Bay	
	SAS	July 07	July 08	Put down at Bird Camp for 3.5 hours	Mackenzie Bay	
	SAS	July 11	July 11	Continuous	Mackenzie Bay	
	SAS	July 11	July 12	Put down at whaling camps	Mackenzie Bay; Kugmallit Bay	
	RAS	July 12	July 13	Put down at Bird Camp for 1 hour	Mackenzie Bay	
	SAS	July 13	July 13	Continuous	Mackenzie Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
75-0050 Cont'd	SAS	July 14	July 14	Continuous	Mackenzie Bay	
	SAS	July 15	July 15	Put down at Camp 16 for 1.5 hours	Mackenzie Bay; East Mackenzie Bay; Kugmallit Bay	
	SAS	July 17	July 17	Continuous	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 18	July 18	Continuous	Kugmallit Bay	
	SAS	July 19	July 19	Put down at whaling camps	East Mackenzie Bay; Mackenzie Bay	
	SAS	July 21	July 22	Continuous	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 23	July 23	Put down at Bird Camp & Fish Point	Mackenzie Bay; East Mackenzie Bay	
	SAS	July 24	July 24	Put down at Hendrickson Island	Kugmallit Bay; East Mackenzie Bay	
	SAS	July 25	July 25	Put down at Camp 16 for 6 hours	Mackenzie Bay; East Mackenzie Bay	
	RAS	July 25	July 25	Continuous	Shingle Point-Komakuk-Camp 16	
	SAS	July 26	July 26	Put down at whaling camps	Mackenzie Bay	
	SAS	July 27	July 27	Continuous	Kugmallit Bay	
	SAS	July 28	July 28	Continuous	Mackenzie Bay	
	SAS	July 29	July 29	Continuous	Mackenzie Bay	
	RAS	July 29	July 29	Continuous	Langley Island-Shingle Point-Komakuk-Alaska	
	SAS	July 30	July 30	Continuous	East Mackenzie Bay	
	SAS	July 30	July 30	Continuous	Kugmallit Bay	
	RAS	July 31	July 31	Put down at Stanton for 1 hour and at Eskimo Lakes	Kugmallit Bay-Atkinson Point-Cape Dalhousie-Nicholson Point-Stanton-Eskimo Lakes-Bar C	
	SAS	Aug. 02	Aug. 02	Continuous	Mackenzie Bay; East Mackenzie Bay	
	SAS	Aug. 02	Aug. 02	Continuous	East Mackenzie Bay; Kugmallit Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
75-0050 Cont'd	SAS	Aug. 03	Aug. 04	Continuous	Mackenzie Bay	
	SAS	Aug. 05	Aug. 05	Continuous	Mackenzie Bay; East Mackenzie Bay	
	RAS	Aug. 05	Aug. 06	Put down at Herschel Island for 1 hour	Langley Island-Shingle Point-King Point-Komakuk-Herschel Island-Shingle Point-Langley Island	
	SAS	Aug. 07	Aug. 07	Continuous	Kugmallit Bay	
	RAS	Aug. 07	Aug. 08	Continuous	Bar C-Toker Point-Atkinson Point-Cape Dalhousie-Atkinson Point-Kugmallit-Bar C	
76-0028	SAS	June 16	June 16	Continuous	7 westernmost lines (see map)	
	SAS	June 17	June 17	Continuous	1 line north of Richards Island (see map)	Incomplete
	SAS	June 18	June 18	Continuous	3 lines north of Liverpool Bay (see map)	
	SAS	June 21	June 21	Continuous	Line north of Shingle Point-line north of Hooper Island & 2 lines north of Tuk Peninsula & 1 line east of Sachs Harbour (see map)	
	SAS	June 22	June 22	Continuous	4 northernmost lines along Banks Island Shelf (see map)	
	SAS	June 23	June 23	Continuous	4 lines in Amundsen Gulf (see map)	Incomplete
	SAS	June 24	June 24	Continuous	7 lines in Amundsen Gulf (see map)	
	SAS	June 25	June 25	Continuous	4 lines along Banks Island Shelf (see map)	Incomplete
	SAS	June 27	June 27	Continuous	4 lines along Banks Island Shelf (see map)	Incomplete
	SAS	June 28	June 28	Continuous	2 lines in Franklin Bay (see map)	Incomplete
	SAS	June 29	June 29	Continuous	Line north of Cape Dalhousie & southernmost line along Banks Island Shelf (see map)	Incomplete
	INCOMPLETE					

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
76-0029	RAS	July 05	July 05	Put down at Kidluit Bay	Tuk-Kidluit Bay-Tuk	
	Shore Watch	July 05	July 12	NS	Kidluit Bay	
	RAS	July 07	July 07	Put down at Herschel Island	Tuk-Kidluit Bay-Pullen Island-Barrier Islands-Shingle Point-Herschel Island	
	RAS	July 10	July 10	Continuous	Tuk-Kugmallit Bay-Baillie Islands	
	RAS	July 11	July 11	Continuous	Tuk-Hendrickson Island-north of Kendall Island-Shallow Bay-Shingle Point	
	RAS	July 14	July 14	Continuous	Tuk-Atkinson Point-Warren Point-Pullen Island-Hooper Island-Tuk	
	RAS	July 16	July 16	Continuous	Tuk-Hendrickson Island-Pullen Island-Pelly Island-Shallow Bay-Shingle Point	
	RAS	July 17	July 17	Continuous	Tuk-Tuft Point-McKinley Bay-Cape Parry-Baillie Islands-Liverpool Bay-Kugmallit Bay	
76-0030	RAS	Aug. 16	Aug. 16	Continuous	Shingle Point-Alaska	
	SAS	Aug. 20	Aug. 20	Continuous	Beaufort coast	
	RAS	Aug. 22	Aug. 22	Continuous	Shingle Point-Alaska	
	RAS	Aug. 25	Aug. 25	Continuous	Shingle Point-Alaska	
	SAS	Aug. 29	Aug. 29	Continuous	Beaufort coast	
	SAS	Aug. 30	Aug. 30	Continuous	Beaufort coast	
	SAS	Aug. 31	Aug. 31	Continuous	Beaufort coast	
	SAS	Sep. 04	Sep. 04	Continuous	Beaufort coast	
	SAS	Sep. 05	Sep. 05	Continuous	Beaufort coast	
	SAS	Sep. 06	Sep. 06	Continuous	Beaufort coast	
	SAS	Sep. 10	Sep. 10	Continuous	Beaufort coast	
	SAS	Sep. 12	Sep. 12	Continuous	Beaufort coast	
	SAS	Sep. 13	Sep. 13	Continuous	Beaufort coast	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
76-0030 Cont'd	SAS	Sep. 18	Sep. 18	Continuous	Beaufort coast	
	SAS	Sep. 19	Sep. 19	Continuous	Beaufort coast	
	SAS	Sep. 21	Sep. 21	Continuous	Beaufort coast	
	RAS	Sep. 30	Sep. 30	Continuous	Ellice Island-Shingle Point	
	RAS	Oct. 02	Oct. 02	Continuous	Ellice Island-Shingle Point	
76-0031	Shore Watch	NS	NS	NS	Tuft Point	
	RVS **INCOMPLETE**	July 28	July 28	Continuous	Tuft Point	
76-0032	Vessel Watch	July 20	Aug. 07	Two 10-minute periods/day	70°10'N, 132°59'W	
	Vessel Watch	Aug. 07	Oct. 16	Two 10-minute periods/day	70°23'N, 135°06'W	
76-0034	RAS	June 27	June 27	Continuous	Mouth of East Channel	
	RAS	July 01	July 01	Put down at Tuk for 2 hours	Kugmallit Bay-East Mackenzie Bay-Mackenzie Bay-Inuvik	
	RAS	July 03	July 04	Put down at whaling camps & Tuk	Inuvik-Shallow Bay-Mackenzie Bay-East Mackenzie Bay-Kugmallit Bay-Inuvik	
	SAS	July 05	July 05	Continuous	Kugmallit Bay	
	SAS	July 05	July 06	Continuous	Niakunak Bay	
	SAS	July 07	July 07	Continuous	Niakunak Bay	
	SAS	July 07	July 07	Continuous	Kugmallit Bay	
	RAS	July 07	July 07	Continuous	Kugmallit Bay	
	SAS	July 10	July 10	Continuous	Niakunak Bay	
	SAS	July 11	July 11	Continuous	Niakunak Bay	
	SAS	July 11	July 11	Continuous	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
76-0034 Cont'd	SAS	July 12	July 12	Put down at whaling camps for 4.5 hours	Niakunak Bay	
	SAS	July 13	July 14	Continuous	Kugmallit Bay	
	SAS	July 16	July 16	Continuous	Kugmallit Bay	
	SAS	July 18	July 18	Continuous	Kugmallit Bay	
	SAS	July 20	July 21	Continuous	Kugmallit Bay; Beluga Bay	
	RAS	July 21	July 22	Put down at whaling camps & Beluga Bay	Tuk-Topkak Point-Warren Point-Beluga Bay-Atkinson Point-Beluga Bay-Tuk	
	SAS	July 27	July 28	Continuous	Kugmallit Bay	
	RAS	July 28	July 28	Continuous	Beluga Bay	
	SAS	July 28	July 28	Continuous	Kugmallit Bay	
	RAS	July 28	July 28	Continuous	Tuft Point-Toker Point	
	RAS	July 29	July 29	Continuous	Kugmallit Bay-Beluga Bay-Atkinson Point-Hutchison Bay-Tuk	
	RAS	July 31	July 31	Put down at Tuft Point for 0.5 hours	Kugmallit Bay-Beluga Bay-Atkinson Point-Tuft Point-Tuk	
	RAS	July 31	July 31	Continuous	Tuk-Tuft Point-Beluga Bay-Atkinson Point-Cape Dalhousie	
	RAS	Aug. 01	Aug. 01	Continuous	Tuk-Beluga Bay-Tuft Point	
	SAS	Aug. 01	Aug. 01	Continuous	Kugmallit Bay	
	SAS	Aug. 03	Aug. 03	Continuous	Kugmallit Bay	
	RAS	Aug. 04	Aug. 05	Continuous	Topkak Point-Toker Point-Hutchison Bay-Atkinson Point-Tuft Point-Tuk	
	SAS	Aug. 05	Aug. 06	Continuous	Kugmallit Bay	
	RAS	Aug. 06	Aug. 06	Put down at Anderson River & Eskimo Lakes	Tuk-Tuft Point-Beluga Bay-Warren Point-Atkinson Point-Cape Dalhousie-Liverpool Bay-Eskimo Lakes-Tuk	
	SAS	Aug. 07	Aug. 08	Continuous	Kugmallit Bay	
	RAS	Aug. 08	Aug. 08	Continuous	Tuk-Tuft Point-Tuk	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
76-0034 Cont'd	RAS	Aug. 10	Aug. 10	Continuous	Tuk-Tuft Point-Atkinson Point-Warren Point-Tuk	
	SAS	Aug. 10	Aug. 10	Continuous	Kugmallit Bay	
	RAS	Aug. 15	Aug. 15	Continuous	Tuk-Warren Point-Atkinson Point-Cape Dalhousie	
	SAS	Aug. 16	Aug. 16	Continuous	Kugmallit Bay	
77-0001	SAS	June 26	June 27	Continuous	Niakunak Bay	
	SAS	June 30	June 30	Continuous	Niakunak Bay	
	SAS	July 03	July 03	Continuous	Niakunak Bay	
	SAS	July 05	July 05	Put down at Bar C for 4 hours between surveys	East Mackenzie Bay; West Mackenzie Bay	
	SAS	July 06	July 07	Put down at Bar C for 2 hours	Niakunak Bay; West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 08	July 08	Put down at Bar C between surveys	Niakunak Bay; East Mackenzie Bay	
	SAS	July 09	July 09	Continuous	Niakunak Bay	
	SAS	July 10	July 10	Continuous	Niakunak Bay	
	SAS	July 12	July 12	Continuous	Niakunak Bay	
	SAS	July 13	July 13	Put down at Bar C between surveys	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 18	July 18	Continuous	Niakunak Bay	
	RAS	July 18	July 18	Continuous	Barrier Islands	
	SAS	July 19	July 20	Put down between surveys	West Mackenzie Bay; Niakunak Bay	
	SAS	July 20	July 21	Continuous	East Mackenzie Bay	
	SAS	July 21	July 21	Continuous	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
77-0001 Cont'd	SAS	July 24	July 24	Continuous	West Mackenzie Bay	
	SAS	July 25	July 25	Continuous	Niakunak Bay	
	SAS	July 27	July 27	Put down at Bar C for 2 hours between surveys	Niakunak Bay; East Mackenzie Bay	
	SAS	July 28	July 28	Continuous	West Mackenzie Bay	
	SAS	July 29	July 29	Continuous	Niakunak Bay	
	SAS	July 30	July 31	Continuous	East Mackenzie Bay	
	SAS	July 31	July 31	Continuous	West Mackenzie Bay	
	SAS	Aug. 01	Aug. 01	Continuous	Niakunak Bay	
	SAS	Aug. 02	Aug. 02	Continuous	East Mackenzie Bay	
	SAS	Aug. 04	Aug. 04	Put down at Shingle Point for 0.5 hours	Niakunak Bay	
	SAS	Aug. 06	Aug. 06	Continuous	West Mackenzie Bay	
	SAS	Aug. 07	Aug. 07	Continuous	Niakunak Bay	
	SAS	Aug. 09	Aug. 09	Continuous	Niakunak Bay	
	SAS	Aug. 11	Aug. 11	NS	Niakunak Bay; West Mackenzie Bay	
77-0036	SAS	June 13	June 13	Continuous	2 lines north of Richards Island (see map)	Incomplete
	SAS	June 14	June 14	Continuous	1 line north of Richards Island & 3 lines north of western end of Tuk Peninsula (see map)	Incomplete
	SAS	June 16	June 16	Continuous	1 line north of Cape Dalhousie (see map)	Incomplete
	SAS	June 17	June 17	Continuous	2 lines along Banks Island Shelf (see map)	Incomplete
	SAS	June 18	June 18	Continuous	2 easternmost lines in Amundsen Gulf & 6 southernmost lines along Banks Island Shelf (see map)	
	SAS	June 19	June 19	Continuous	2 lines in Amundsen Gulf (see map)	Incomplete

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
77-0036 Cont'd	SAS	June 20	June 20	Continuous	3 lines in Amundsen Gulf (see map)	Incomplete
	SAS	June 21	June 21	Continuous	2 lines in Amundsen Gulf (see map)	Incomplete
	RAS	June 21	June 21	Continuous	Nelson Head-Holman-Cape Parry	
	INCOMPLETE					
77-0037	RAS	July 02	July 02	Continuous	Kugmallit Bay-Pullen Island-Warren Point-Kittigazuit	
	RAS	July 03	July 03	Put down for 2 hours	Inuvik-Shallow Bay-Yukon coast-north of Kay Point-Mackenzie Bay-Kugmallit Bay	
	SAS	July 04	July 04	Continuous	Kugmallit Bay	
	SAS	July 07	July 07	Continuous	East Mackenzie Bay	
	SAS	July 08	July 08	Continuous	Kugmallit Bay	
	RAS	July 08	July 08	Continuous	Tuk-East Mackenzie Bay-Tuk	
	SAS	July 10	July 10	Continuous	Kugmallit Bay	
	RAS	July 11	July 11	Put down at Kendall Island twice	Tuk-Kendall Island-Garry Island-Pelly Island-Kendall Island-Tuk	
	RAS	July 12	July 12	Continuous	Beluga Bay-Hutchison Bay	
	SAS	July 13	July 13	Continuous	Kugmallit Bay	
	SAS	July 17	July 18	Continuous	Kugmallit Bay	
	RAS	July 18	July 18	Continuous	Hutchison Bay-Beluga Bay	
	SAS	July 20	July 21	Continuous	Kugmallit Bay	
	RAS	July 21	July 21	Continuous	Warren Point-Hutchison Bay-Beluga Bay	
	RAS	July 21	July 21	Put down at Tuft Point for 1.5 hours	Tuk-Tuft Point-Atkinson Point-Tuft Point-Hutchison Bay-Kendall Island	
	RAS	July 23	July 23	Continuous	Tuk-Tuft Point-Warren Point-Atkinson Point-Beluga Bay-Kugmallit Bay	
	RAS	July 24	July 24	Continuous	Tuk-Tuft Point-Warren Point-Atkinson Point-Beluga Bay-Tuft Point-Tuk	
	SAS	July 26	July 26	Continuous	Kugmallit Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
77-0037 Cont'd	RAS	July 26	July 26	Continuous	Tuft Point-Warren Point-Hutchison Bay-Beluga Bay	
	RAS	July 27	July 27	Continuous	Tuk-Tuft Point-Beluga Bay-Warren Point-Hutchison Bay-Atkinson Point-Warren Point-Tuft Point-Pullen Island-Kendall Island	
	SAS	July 28	July 28	Continuous	Kugmallit Bay	
	RAS	July 30	July 30	Continuous	Tuk-Tuft Point-Beluga Bay-Warren Point-Atkinson Point-Hutchison Bay	
	SAS	July 31	Aug. 01	Continuous	Kugmallit Bay	
	SAS	Aug. 02	Aug. 03	Continuous	Kugmallit Bay	
	RAS	Aug. 03	Aug. 03	Continuous	Tuk-Tuft Point-Warren Point-Atkinson Point-Cape Dalhousie-McKinley Bay-Hutchison Bay-Beluga Bay-Tuft Point	
	SAS	Aug. 06	Aug. 06	Continuous	Kugmallit Bay	
	SAS	Aug. 08	Aug. 08	Continuous	Kugmallit Bay	
	RAS	Aug. 08	Aug. 08	Continuous	Warren Point-Atkinson Point-Hutchison Bay-Warren Point-Tuk	
	SAS	Aug. 10	Aug. 10	Continuous	Kugmallit Bay	
77-0038	RAS	May 30	May 31	Continuous	Inuvik-70°00'N, 133°36'W-Yukon/Alaska border-75°00'N, 135°30'W-75°00'N, 134°15'W-71°40'N, 129°40'W-Inuvik	
	RAS	May 31	June 01	Continuous	Inuvik-Cape Bathurst-Cape Parry-Nelson Head-Sachs Harbour-Cape Prince Alfred-74°33'N, 131°21'W-Inuvik	
	RAS	June 02	June 02	Continuous	Inuvik-69°48'N, 133°31'W-Sachs Harbour-75°00'N, 125°25'W-75°35'N, 127°26'W-71°20'N, 130°30'W-Inuvik	
	RAS	June 05	June 05	Continuous	Inuvik-70°00'N, 139°09'W-72°30'N, 139°09'W-71°25'N, 132°50'W-Inuvik	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
77-0038 Cont'd	RAS	June 08	June 08	Continuous	Inuvik-70°50'N, 132°50'W-west of Baillie Islands-Inuvik	
	RAS	June 10	June 10	Continuous	Inuvik-Warren Point-71°15N, 126°20'W -Inuvik	
	RAS	June 11	June 11	Continuous	Inuvik-70°27'N, 133°00'W-70°54'N, 137°24'W-73°24'N, 137°53'W-73°00'N, 130°00'W-Cape Bathurst-Inuvik	
	RAS	June 17	June 17	Continuous	Inuvik-70°00'N, 137°58'W-73°43'N, 137°43'W-75°00'N, 132°00'W-Cape Bathurst-Inuvik	
	RAS	July 05	July 05	Continuous	Inuvik-60°30'N, 137°43'W-north of Pullen Island-Cape Dalhousie-70°14'N, 131°08'W-Tuk	
77-0039	Vessel Watch	July 18	Oct. 03	Two 10-minute periods/day	Ukalerk	
	Vessel Watch	July 27	Sep. 25	Two 10-minute periods/day	Kopanoar	
	Vessel Watch	Aug. 02	Sep. 25	Two 10-minute periods/day	Nektoralik	
	Vessel Watch	Aug. 21	Sep. 20	Two 10-minute periods/day	Natsek	
	INCOMPLETE					
78-0008	RAS	June 25	June 25	Continuous	Kugmallit Bay-Richards Island-Pelly Island-north of King Point-69°50'N, 138°40'W-south of Garry Island-Inuvik	
	RAS	June 26	June 26	Continuous	Inuvik-Shallow Bay-70°12'N, 137°31'-east on 69°59' latitude-north of Warren Point-Inuvik	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
78-0008 Cont'd	RAS	June 29	June 29	Continuous	Inuvik-Shallow Bay-Shingle Point-Garry Island-69°25'N, 137°20'W-69°57'N, 133°50'W-Inuvik	
	SAS	June 30	June 30	Continuous	Niakunak Bay	
	RAS	June 30	June 30	Continuous	Shingle Point-Garry Island	
	RAS	July 01	July 01	Continuous	Kugmallit Bay	
	SAS	July 01	July 01	Continuous	Niakunak Bay	
	RAS	July 01	July 01	Continuous	Shingle Point-Garry Island-Bar C	
	RAS	July 03	July 03	Continuous	Bar C-70°22'N, 132°45'W-69°28'N, 136°50'W	
	SAS	July 03	July 03	Continuous	Niakunak Bay	
	RAS	July 04	July 04	Continuous	Bar C-Kugmallit Bay-Warren Point-70°00'N, 132°30'W-70°00'N, 134°30'W-69°15'N, 137°00'W-Bar C	
	RAS	July 06	July 06	Continuous	Bar C-West Mackenzie Bay-Bar C	
	SAS	July 07	July 07	Continuous	Niakunak Bay	
	SAS	July 07	July 07	Continuous	Niakunak Bay	
	SAS	July 08	July 08	Continuous	Kugmallit Bay	
	RAS	July 08	July 08	Put down at Tuk 1 hour	Kugmallit Bay-Shallow Bay-Mackenzie Bay-Bar C	
	SAS	July 09	July 09	Continuous	Niakunak Bay	
	SAS	July 11	July 11	Continuous	Niakunak Bay	
	RAS	July 11	July 11	Continuous	Kugmallit Bay	
	SAS	July 12	July 12	Continuous	Kugmallit Bay	
	SAS	July 13	July 13	Continuous	Kugmallit Bay	
	RAS	July 13	July 13	Continuous	Toker Point-Warren Point-Atkinson Point-40 nautical miles north of Nicholson Point-Atkinson Point-Hutchison Bay-Beluga Bay-Bar C	
	RAS	July 13	July 13	Continuous	Bar C-Pullen Island-East Mackenzie Bay-Shingle Point	
	SAS	July 15	July 15	Put down at Niakunak for 4 hours	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
78-0008 Cont'd	SAS	July 16	July 16	Continuous	Kugmallit Bay	
	RAS	July 16	July 16	Continuous	Kugmallit Bay-Pullen Island-Hooper Island-Pelly Island-Kendall Island	
	SAS	July 17	July 17	Continuous	Niakunak Bay	
	SAS	July 19	July 19	Continuous	Kugmallit Bay	
	RAS	July 19	July 19	Continuous	Tuk-Tuft Point-Beluga Bay-Hutchison Bay-Atkinson Point-Hutchison Bay-Beluga Bay	
	SAS	July 20	July 20	Continuous	Kugmallit Bay	
	RAS	July 20	July 20	Continuous	Pullen Island-Richards Island-Pullen Island-Hooper Island-Bar C	
	SAS	July 22	July 22	Put down at Pullen Island for 1 hour	Kugmallit Bay-Richards Island-Hooper Island-Pullen Island-Kugmallit Bay	
	RAS	July 23	July 23	Continuous	Toker Point-Tuft Point-Beluga Bay-Atkinson Point-Hutchison Bay-Toker Point	
	SAS	July 24	July 24	Continuous	Kugmallit Bay	
	RAS	July 24	July 24	Continuous	Kugmallit Bay-Pullen Island-Hooper Island-Tuft Point-Atkinson Point-Hutchison Bay-Kugmallit Bay	
	SAS	July 26	July 26	Continuous	Area around Issungnak	
	SAS	July 27	July 27	Continuous	Kugmallit Bay	
	SAS	July 27	July 27	Continuous	Niakunak Bay	
	RAS	July 28	July 28	Put down for 2 hours	Bar C-Kugmallit Bay-East Mackenzie Bay-Tuft Point-Warren Point-Atkinson Point-Hutchison Bay-Beluga Bay-Kugmallit Bay-Bar C	
	SAS	July 29	July 29	Put down at Tuk for 0.5 hours	Area around Issungnak	
	SAS	July 30	July 30	Continuous	Kugmallit Bay	
	SAS	July 30	July 30	Continuous	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
78-0008 Cont'd	RAS	July 31	July 31	Continuous	Bar C-Tuft Point-Warren Point-Tuft Point-Beluga Bay-Atkinson Point-Cape Dalhousie-Anderson River	
	SAS	July 31	Aug. 01	Continuous	Kugmallit Bay	
	RAS	Aug. 01	Aug. 01	Continuous	Toker Point-Tuft Point-Warren Point-Tuft Point-Bar C	
	SAS	Aug. 01	Aug. 01	Continuous	Niakunak Bay	
	SAS	Aug. 02	Aug. 02	Continuous	Area around Issungnak	
	RAS	Aug. 02	Aug. 02	Continuous	Bar C-Tuft Point-Hutchison Bay-Beluga Bay-Kugmallit Bay	
	SAS	Aug. 03	Aug. 03	Continuous	Kugmallit Bay	
	RAS	Aug. 03	Aug. 03	Continuous	Tuft Point	
	RAS	Aug. 04	Aug. 04	Continuous	Tuft Point-Warren Point-Atkinson Point-Hutchison Bay-Beluga Bay-Warren Point-Tuft Point-Kugmallit Bay	
	SAS	Aug. 05	Aug. 05	Continuous	Kugmallit Bay	
	RAS	Aug. 07	Aug. 07	Continuous	Toker Point-Tuft Point-Warren Point-Atkinson Point-Hutchison Bay-Beluga Bay-Tuft Point-Tuk	
	SAS	Aug. 07	Aug. 07	Put down at Shingle Point for 1 hour	Niakunak Bay	
	SAS	Aug. 08	Aug. 08	Continuous	Area around Issungnak	
	RAS	Aug. 08	Aug. 08	Continuous	Tuk-Tuft Point-Bar C	
	RAS	Aug. 10	Aug. 10	Continuous	Toker Point-Tuft Point-Warren Point-Hutchison Bay-Pullen Island-East Mackenzie Bay-Bar C	
	RAS	Aug. 10	Aug. 10	Continuous	Tuft Point-Warren Point-Atkinson Point-Hutchison Bay-Beluga Bay-Toker Point-Tuk	
	RAS	Aug. 11	Aug. 12	Put down at Tuft Point for 0.5 hours	Tuft Point-Warren Point-Atkinson Point-Hutchison Bay-Beluga Bay-Tuft Point-Beluga Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
78-0008 Cont'd	SAS	Aug. 12	Aug. 12	Continuous	Kugmallit Bay	
78-0015	SAS	June 13	June 13	Continuous	6 lines from north of Pullen Island-Hutchison Bay (see map)	
	SAS	June 15	June 15	Continuous	7 lines north of Yukon coast (see map)	
	SAS	June 16	June 16	Continuous	4 lines north of Yukon coast & 5 lines from north of Shallow Bay-Richards Island (see map)	
	SAS	June 17	June 17	Continuous	4 lines north of middle of Tuk Peninsula (see map)	
	SAS	June 18	June 18	Continuous	1 line north of Tuk Peninsula (see map)	
	SAS	June 19	June 19	Continuous	6 lines along southern Banks Island Shelf (see map)	
	SAS	June 21	June 21	Continuous	8 easternmost lines in Amundsen Gulf (see map)	
	SAS	June 22	June 22	Continuous	9 northernmost lines along Banks Island Shelf (see map)	
	SAS	June 23	June 23	Continuous	4 easternmost lines in Amundsen Gulf (see map)	
	SAS	June 24	June 24	Continuous	3 lines north of Liverpool Bay & 1 line along Banks Island Shelf & Nelson Head-Holman-Cape Parry (see map)	
	SAS	June 25	June 25	Continuous	Line north of Cape Dalhousie & southernmost line along Banks Island Shelf (see map)	
78-0027	Vessel Watch	June 23	July 06	Continuous	Summers Harbour	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
78-0027 Cont'd	Vessel Watch	June 24	July 08	Continuous	Herschel Island	
	Vessel Watch	July 07	Aug. 06	Continuous	Kaglulik	
	Vessel Watch	July 08	July 23	Continuous	Natsek	
	Vessel Watch	July 08	Oct. 17	Continuous	Ukalerk	
	Vessel Watch	July 24	Oct. 15	Continuous	Kopanoar	
	Vessel Watch	Aug. 07	Aug. 17	Continuous	Nerlerk	
	Vessel Watch	Aug. 19	Sep. 02	Incidental	Tarsiut	
	Vessel Watch	Sep. 03	Oct. 14	Incidental	Natsek	
	Vessel Watch	Oct. 16	Oct. 28	Incidental	Tarsiut	
	Vessel Watch	Nov. 01	Nov. 04	Incidental	Kaglulik	
79-0027	RVS	July 23	July 30	NS	Tuk-Sachs Harbour-Tuk	
	RVS	July 23	Aug. 09	NS	Tuk-Nicholson Point-Cape Parry-Dolphin and Union Strait-Tuk	
	RVS	Aug. 12	Aug. 27	NS	Tuk-Holman-Paulatuk-Harrowby Bay-Tuk	
79-0028	SAS	June 15	June 15	Continuous	7 westernmost lines north of Yukon coast (see map)	
	SAS	June 16	June 16	Continuous	7 lines from Shingle Point-west of Hooper Island (see map)	
	SAS	June 18	June 18	Continuous	12 lines from west of Hooper Island-east of McKinley Bay (see map)	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
79-0028 Cont'd	SAS	June 19	June 19	Continuous	5 lines from Nuvorak Point-Wood Bay (see map)	
	SAS	June 20	June 20	Continuous	1 line in Amundsen Gulf & 2 southernmost lines along Banks Island Shelf & 3 lines along middle of Banks Island Shelf (see map)	
	SAS	June 21	June 21	Continuous	3 easternmost lines in Amundsen Gulf & Nelson Head-Holman-Cape Parry (see map)	
	SAS	June 22	June 22	Continuous	4 lines in Amundsen Gulf (see map)	
	SAS	June 23	June 23	Continuous	1 line in Amundsen Gulf & 7 northernmost lines along Banks Island Shelf (see map)	
	SAS	June 24	June 24	Continuous	5 lines along Banks Island Shelf (see map)	
	SAS	June 25	June 25	Continuous	1 line west of Baillie Islands & 7 lines in Amundsen Gulf (see map)	
79-0029	RAS	Sep. 24	Sep. 24	Continuous	Alaska-Herschel Island-69°16'N, 137°25'W-north of Herschel Island--Alaska	
	RAS	Oct. 05	Oct. 05	Continuous	Alaska-around Herschel Island-69°55'N, 139°30'W-Alaska	
79-0031	Vessel Watch	June 19	June 27	Continuous	McKinley Bay (?)	
	Vessel Watch	July 02	July 10	Continuous	Kaglulik	
	Vessel Watch	July 02	Aug. 08	Continuous	Ukalerk	
	Vessel Watch	July 04	Oct. 29	Continuous	Nerlerk	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
79-0031 Cont'd	Vessel Watch	July 11	Oct. 25	Continuous	Tarsiut	
	Vessel Watch	Aug. 08	Oct. 07	Continuous	Natsek	
	Vessel Watch	Aug. 09	Sep. 11	Continuous	Kopanoar	
	Vessel Watch	Sep. 13	Sep. 17	Continuous	Kenalooak	
	Vessel Watch	Sep. 20	Oct. 21	Continuous	Kenalooak	
	Vessel Watch	Oct. 09	Nov. 22	Continuous	Kopanoar	
	Vessel Watch	Oct. 23	Nov. 10	Continuous	Koakoak	
79-0033	SAS	June 22	June 22	Continuous	North of Cape Parry & eastern Franklin Bay	
	SAS	July 14	July 14	Continuous	North of Cape Parry & eastern Franklin Bay	
	SAS	July 31	July 31	Continuous	North of Cape Parry & eastern Franklin Bay	
	RAS	July 31	July 31	Continuous	Northwest coast of Parry Peninsula	
	RAS	Aug. 01	Aug. 01	Continuous	Northeast coast of Parry Peninsula	
	RAS	Aug. 02	Aug. 02	Continuous	Coast of Booth Islands	
79-0034	RAS	June 20	June 21	Continuous	Bar C-north of Pelly Island-Mackenzie Bay-Herschel Island-Komakuk-Garry Island-Atkinson Point-Cape Dalhousie-Baillie Islands-Tuk	
	SAS	June 21	June 21	Continuous	Niakunak Bay	
	RAS	June 22	June 22	Continuous	Tuk-McKinley Bay-Baillie Islands-Franklin Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
79-0034 Cont'd	SAS	June 23	June 23	Continuous	Niakunak Bay	
	SAS	June 24	June 24	Continuous	Niakunak Bay	
	RAS	June 24	June 24	Continuous	Kugmallit Bay	
	RAS	June 27	June 27	Continuous	Kugmallit Bay	
	SAS	June 27	June 27	Continuous	Niakunak Bay	
	RAS	June 28	June 28	Continuous	East Mackenzie Bay	
	SAS	June 29	June 29	Put down for 7 minutes	Niakunak Bay	
	RAS	June 29	June 29	Continuous	Shallow Bay	
	SAS	June 30	June 30	Continuous	West Mackenzie Bay	
	SAS	June 30	June 30	Continuous	Niakunak Bay	
	SAS	July 01	July 01	Continuous	East Mackenzie Bay	
	RAS	July 01	July 02	Continuous	Bar C-Pelly Island-Mackenzie Bay-Pullen Island-Kugmallit Bay-Baillie Islands-Cape Dalhousie	
	SAS	July 02	July 02	Continuous	Kugmallit Bay	
	SAS	July 02	July 02	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 04	July 04	Continuous	Niakunak Bay	
	SAS	July 10	July 10	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 10	July 10	Continuous	Kugmallit Bay	
	RAS	July 10	July 10	Continuous	Toker Point-Warren Point-Toker Point	
	RAS	July 11	July 11	Continuous	Cape Parry-Franklin Bay-70°22'N, 130°45'W	
	SAS	July 12	July 12	Continuous	Niakunak Bay	
	RAS	July 12	July 12	Continuous	West Mackenzie Bay	
	SAS	July 13	July 13	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 14	July 14	RAS occurred in middle of survey	Kugmallit Bay	
	RAS	July 14	July 14	Continuous	Toker Point-Warren Point-Toker Point	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
79-0034 Cont'd	SAS	July 15	July 15	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 16	July 16	Continuous	Kugmallit Bay	
	RAS	July 16	July 16	Continuous	Tibjak Point-Tuft Point-Warren Point -Hutchison Bay-Kugmallit Bay	
	SAS	July 18	July 18	Continuous	Kugmallit Bay	
	RAS	July 18	July 18	Continuous	Toker Point-Tuft Point-Warren Point-Tuft Point-Pullen Island	
	SAS	July 19	July 19	Put down at Kendall Island for 2 hours between surveys	East Mackenzie Bay; West Mackenzie Bay	
	SAS	July 20	July 20	Continuous	Niakunak Bay	
	SAS	July 21	July 21	Continuous	Area around Issungnak	
	SAS	July 22	July 22	Continuous	Kugmallit Bay	
	RAS	July 22	July 22	Continuous	Toker Point-Tuft Point-Warren Point-Hutchison Bay-Pullen Island	
	RAS	July 23	July 23	Continuous	Bar C-Tuft Point-Beluga Bay-Hutchison Bay-Tuft Point	
	SAS	July 24	July 24	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 25	July 25	Continuous	Kugmallit Bay	
	SAS	July 29	July 29	Continuous	West Mackenzie Bay	
	SAS	July 30	July 30	Continuous	East Mackenzie Bay	
	RAS	July 31	July 31	Continuous	Tibjak Point-Tuft Point-Warren Point -Hutchison Bay-Beluga Bay	
	SAS	July 31	July 31	Continuous	Kugmallit Bay	
	SAS	Aug. 01	Aug. 01	Continuous	Kugmallit Bay	
	SAS	Aug. 02	Aug. 02	Continuous	Area around Issungnak	
	SAS	Aug. 03	Aug. 03	Put down at Shingle Point for 2 hours in middle of survey	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
79-0034 Cont'd	SAS	Aug. 05	Aug. 05	Put down at Kendall Island between surveys	West Mackenzie Bay; East Mackenzie Bay	
	SAS	Aug. 06	Aug. 06	Continuous	Kugmallit Bay	
	SAS	Aug. 08	Aug. 08	Continuous	Area around Issungnak	
	RAS	Aug. 08	Aug. 08	Continuous	Toker Point-Tuft Point-Beluga Bay-Hutchison Bay-Atkinson Point-Cape Dalhousie-McKinley Bay-Warren Point-Tuft Point	
	SAS	Aug. 09	Aug. 09	Continuous	Niakunak Bay	
	RAS	Aug. 11	Aug. 11	Continuous	Tuk-Warren Point-McKinley Bay-Warren Point	
	SAS	Aug. 11	Aug. 11	Continuous	Kugmallit Bay	
80-0019	RAS	July 21	July 21	Continuous	Alaska-Herschel Island-Shingle Point-Shallow Bay	
	RAS	July 22	July 22	Continuous	Tuk-Baillie Islands-Franklin Bay-Baillie Islands-Liverpool Bay-Tuk	Flight sequence may be reversed.
	RAS	July 23	July 23	Continuous	Tuk-70°00'N, 133°00'W-north of Baillie Islands-Baillie Islands-along Tuk Peninsula-Tuk	Flight sequence may be reversed.
	RVS	Aug. 03	Aug. 07	NS	Tuk-McKinley Bay-Cape Dalhousie-Harrowby Bay-west of Baillie Islands-Tuk	
	RVS	Aug. 09	Aug. 11	NS	Tuk-Issungnak-Pullen Island-Issungnak-Tuk	
	RAS	Aug. 14	Aug. 14	Continuous	Offshore of Tuk Peninsula	
	SAS	Aug. 18	Aug. 18	Continuous	Offshore of Tuk Peninsula	
	SAS	Aug. 19	Aug. 19	Continuous	Offshore of Tuk Peninsula	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
80-0019 Cont'd	RAS	Aug. 20	Aug. 20	Continuous	Tuk-72°05'N, 133°08'W-southwest coast of Banks Island-Nelson Head-Franklin Bay-Baillie Islands-along Tuk Peninsula-Tuk	Flight sequence may be reversed.
	RVS	Aug. 20	Aug. 25	NS	Tuk-69°55'N, 132°15'W-69°50'N, 132°45'W-Warren Point-70°00'N, 132°55'W-Tuk	
	RAS	Aug. 21	Aug. 21	Continuous	Tuk-north of Tuk Peninsula-70°10'N, 133°25'W-west of Pullen Island-70°20'N, 133°00'W-70°33', 130°15'W-Tuk	Flight sequence may be reversed.
	RAS	Aug. 22	Aug. 22	Continuous	Tuk-along Tuk Peninsula-west along 70°00'N-Alaska	
	RAS	Aug. 30	Aug. 30	Continuous	Alaska-Herschel Island-70°25'N, 140°00'W-69°52'N, 140°45'W-Alaska	
	RAS	Aug. 31	Aug. 31	Continuous	Tuk-72°00'N, 131°00'W-Sachs Harbour-Franklin Bay-Baillie Islands-along Tuk Peninsula-Tuk	Flight sequence may be reversed.
	SAS	Sep. 03	Sep. 03	Continuous	Offshore area from Tuk-Herschel Island	
	RAS	Sep. 04	Sep. 04	Continuous	Offshore Tuk Peninsula	
	RAS	Sep. 04	Sep. 04	Continuous	Tuk-69°55'N, 141°00'W-Alaska	
	RAS	Sep. 12	Sep. 12	Continuous	Offshore Tuk Peninsula	
80-0022	RAS	July 28	July 28	Continuous	Alaska-73°35'N, 129°00'W-76°10'N, 128°45'W-Alaska	
	RAS	Aug. 02	Aug. 02	Continuous	Alaska-69°40'N, 140°18'W-69°46'N, 139°58'W-Alaska	
	RAS	Sep. 08	Sep. 08	Continuous	Alaska-Herschel Island-69°36'N, 137°50'W-70°10'N, 140°07'W-Alaska	
	RAS	Sep. 10	Sep. 10	Continuous	Alaska-Herschel Island-Inuvik-70°13'N, 140°45'W-Alaska	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
80-0022 Cont'd	RAS	Sep. 14	Sep. 14	Continuous	Alaska-Herschel Island-Tuk-70°00'N, 133°45'W-70°15'N, 135°08'W-69°54'N, 141°00'W-Alaska	
	RAS	Sep. 16	Sep. 16	Continuous	Alaska-Herschel Island-69°52'N, 138°45'W-70°00'N, 141°00'W-Alaska	
	RAS	Oct. 21	Oct. 21	Continuous	Alaska-69°41'N, 141°00'W-69°43'N, 139°10'W-69°43'N, 141°00'W-Alaska	
	RAS	Oct. 24	Oct. 24	Continuous	Alaska-69°43'N, 141°00'W-69°43'N, 138°53'W-69°53'N, 138°53'W-69°53'N, 141°00'W-Alaska	
80-0023	Vessel Watch	July 15 (?)	Sep. 18	Continuous	Kopanoar	
	Vessel Watch	July 22	Sep. 16	Continuous	Koakoak	
	Vessel Watch	July 22 (?)	Sep. 16	Continuous	Orvilruk	
	Vessel Watch	Aug. 02	Sep. 08	Continuous	Kenalooak	
	Vessel Watch	Sep. 09	Sep. 14	Continuous	Kilannik	
	INCOMPLETE					
80-0025	RAS	Aug. 03	Aug. 03	Continuous	Offshore of Kugmallit Bay	Incomplete
	RAS	Aug. 04	Aug. 04	Continuous	Offshore of Kugmallit Bay	Incomplete
	RAS	Aug. 06	Aug. 06	Continuous	Offshore of Kugmallit Bay	Incomplete
	RAS	Aug. 07	Aug. 07	Continuous	Offshore of Kugmallit Bay	Incomplete
	RVS	Aug. 07	Aug. 14	NS	NS	
	SAS	Aug. 09	Aug. 09	Continuous	Area around Issungnak	
	SAS	Aug. 11	Aug. 11	Continuous	Area around Issungnak	
	RAS	Aug. 12	Aug. 12	Continuous	Offshore of Kugmallit Bay	Incomplete
	SAS	Aug. 12	Aug. 12	Continuous	Area around Issungnak	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
80-0025 Cont'd	RAS	Aug. 14	Aug. 14	Continuous	Offshore of Kugmallit Bay	Incomplete
	Shore Watch	Aug. 16	Sep. 13	NS	69°04'N, 138°00'W	
	RAS	Aug. 19	Aug. 19	Continuous	Offshore of Kugmallit Bay & Tuk Peninsula	
	RAS	Aug. 20	Aug. 20	Continuous	Offshore of Kugmallit Bay	Incomplete
	RAS	Aug. 20	Aug. 20	Continuous	Offshore of Kugmallit Bay & Tuk Peninsula	
	RAS	Aug. 21	Aug. 21	Continuous	Offshore of Warren Point	Incomplete
	SAS	Aug. 22	Aug. 22	Continuous	Area around Issungnak	
	RAS	Aug. 22	Aug. 22	Continuous	Offshore of Tuk Peninsula	Incomplete
	Shore Watch	Aug. 23	Sep. 11	NS	69°35'N, 138°51'W	
	RAS	Aug. 23	Aug. 23	Continuous	Offshore of Tuk Peninsula	Incomplete
	RVS	Aug. 23	Aug. 27	NS	NS	
	RAS	Aug. 27	Aug. 27	Continuous	Offshore of Tuk Peninsula	Incomplete
	RAS	Aug. 29	Aug. 29	Continuous	Area northwest of Baillie Islands	Incomplete
	RAS	Aug. 31	Aug. 31	Continuous	Offshore of Tuk Peninsula	Incomplete
80-0026	SAS	Aug. 06	Aug. 06	Put down for 1 hour during survey	12 westernmost lines (see map)	
	SAS	Aug. 07	Aug. 07	Continuous	Next 6 lines east from Aug. 6 (see map)	
	SAS	Aug. 21	Aug. 21	Continuous	6 westernmost lines (see map)	
	SAS	Aug. 23	Aug. 23	Continuous	Next 6 lines east from Aug. 21 (see map)	
	SAS	Aug. 24	Aug. 24	Continuous	Next 4 lines east from Aug. 23 (see map)	
	SAS	Sep. 03	Sep. 03	Put down for 2.5 hours during survey	12 westernmost lines (see map)	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
80-0026 Cont'd	SAS	Sep. 04	Sep. 04	Put down for 3.5 hours during survey	8 easternmost lines (see map)	
80-0027	Vessel Watch	July 20	July 24	4 watches/day	McKinley Bay	
	RVS	July 21	July 21	Continuous	McKinley Bay	
	RAS	July 22	July 22	Continuous	McKinley Bay	
	Vessel Watch	Aug. 05	Aug. 13	4 watches/day	McKinley Bay	
	RVS	Aug. 10	Aug. 10	Continuous	McKinley Bay	
	RVS	Aug. 12	Aug. 12	Continuous	McKinley Bay	
	Vessel Watch	Aug. 26	Sep. 01	4 watches/day	McKinley Bay	
	RVS	Aug. 27	Aug. 27	Continuous	McKinley Bay	
80-0029	RAS	June 19	June 19	Continuous	Inuvik-Kugmallit Bay-East Mackenzie Bay-Mackenzie Bay-Inuvik	
	RAS	June 21	June 21	Put down at Pullen Island for 1 hour	Tuk-north of Pullen Island-Komakuk-Alaska-Pullen Island-Baillie Islands-Inuvik	
	RAS	June 24	June 24	Put down for 1.5 hours	Bar C-Pelly Island-ice edge-Kay Point-Mackenzie Bay-Bar C	
	RAS	June 25	June 25	Put down at Pullen Island for 1 hour	Bar C-Pelly Island-ice edge-Herschel Island-Malcolm River-Herschel Island-Kay Point-Pullen Island-Baillie Islands	
	RAS	June 27	June 27	Continuous	Bar C-West Mackenzie Bay-Kay Point-northwest of Pelly Island-Bar C	
	RAS	June 27	June 27	Continuous	Bar C-Richards Island-East Mackenzie Bay-Mackenzie Bay	
	SAS	June 28	June 28	Continuous	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
80-0029 Cont'd	SAS	June 29	June 29	Continuous	West Mackenzie Bay	
	RAS	June 29	June 29	Continuous	Bar C-ice edge-Baillie Islands-Tuk	
	SAS	June 30	June 30	Continuous	Niakunak Bay	
	RAS	June 30	June 30	Continuous	Bar C-Kugmallit Bay-ice edge-Atkinson Point	
	SAS	July 01	July 01	Continuous	Niakunak Bay	
	SAS	July 02	July 02	Continuous	West Mackenzie Bay	
	SAS	July 03	July 03	Continuous	Niakunak Bay	
	SAS	July 05	July 05	Continuous	Kugmallit Bay	
	RAS	July 05	July 05	Continuous	Hendrickson Island-Richards Island-Pullen Island-Toker Point-Tuft Point-Atkinson Point-McKinley Bay-Tuk	
	SAS	July 05	July 05	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	RAS	July 06	July 06	Continuous	Tuk-Tuft Point-Warren Point-Atkinson Point-Cape Dalhousie-Baillie Islands-Franklin Bay-Baillie Islands-McKinley Bay-Tuk	
	SAS	July 08	July 08	Continuous	West Mackenzie Bay	
	SAS	July 09	July 09	Put down at Shingle Point for 5 hours between surveys	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 10	July 10	Continuous	Niakunak Bay	
	SAS	July 10	July 10	Continuous	Kugmallit Bay	
	RAS	July 10	July 10	Continuous	Kugmallit Bay-Pullen Island-Tuft Point-Warren Point-Hutchison Bay-Bar C	
	SAS	July 11	July 11	Put down at Kendall Island for 1.5 hours	West Mackenzie Bay; East Mackenzie Bay	
	SAS	July 12	July 12	Continuous	Kugmallit Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
80-0029 Cont'd	RAS	July 12	July 12	Continuous	Kugmallit Bay-Pullen Island-Bar C	
	SAS	July 14	July 14	Continuous	West Mackenzie Bay	
	RAS	July 14	July 14	Put down at Aklavik	Bar C-Aklavik-West Channel	
	SAS	July 15	July 15	Continuous	Niakunak Bay	
	SAS	July 16	July 16	Continuous	Kugmallit Bay	
	RAS	July 16	July 16	Continuous	Warren Point-Hutchison Bay-Beluga Bay	
	SAS	July 19	July 19	Continuous	West Mackenzie Bay; East Mackenzie Bay	
	RAS	July 20	July 20	Continuous	Kugmallit Bay-Warren Point-Hutchison Bay	
	SAS	July 21	July 21	Continuous	West Mackenzie Bay	
	SAS	July 22	July 22	Continuous	Kugmallit Bay	
	RAS	July 22	July 22	Continuous	Kugmallit Bay-Pullen Island-Hansen Harbour	
	SAS	July 24	July 24	Continuous	Area around Issungnak	
	SAS	July 24	July 24	Continuous	Kugmallit Bay	
	SAS	July 25	July 25	Continuous	Niakunak Bay	
	RAS	July 26	July 26	Continuous	Toker Point-Atkinson Point-Cape Dalhousie-Nicholson	
	SAS	July 28	July 28	Continuous	Kugmallit Bay	
	RAS	July 28	July 28	Continuous	Kugmallit Bay-Pullen Island-Bar C	
	RAS	July 29	July 29	Continuous	Bar C-Kugmallit Bay-Tuft Point-Hutchison Bay-McKinley Bay-Cape Dalhousie-Baillie Islands-Atkinson Point-Warren Point	
	RAS	July 31	July 31	Continuous	Bar C-Tuft Point-Hutchison Bay-Atkinson Point-Warren Point-Kugmallit Bay-Bar C	
	SAS	Aug. 03	Aug. 03	Continuous	Kugmallit Bay	
	RAS	Aug. 03	Aug. 03	Continuous	Tuft Point-Warren Point-Hutchison Bay-Beluga Bay	
	SAS	Aug. 05	Aug. 05	Continuous	Area around Issungnak	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
80-0029 Cont'd	SAS	Aug. 05	Aug. 05	Continuous	East Mackenzie Bay	
	RAS	Aug. 06	Aug. 06	Continuous	Bar C-Toker Point-Warren Point-Hutchison Bay-McKinley Bay-Cape Dalhousie-McKinley Bay-Hutchison Bay-Kugmallit Bay	
	SAS	Aug. 07	Aug. 07	Continuous	West Mackenzie Bay	
	SAS	Aug. 09	Aug. 09	Continuous	Area around Issungnak	
	RAS	Aug. 11	Aug. 11	Continuous	Toker Point-Tuft Point-Hutchison Bay-McKinley Bay-Warren Point-Kugmallit Bay	
	SAS	Aug. 12	Aug. 12	Continuous	Kugmallit Bay	
	RAS	Aug. 12	Aug. 12	Continuous	Tuk-Warren Point-Hutchison Bay-McKinley Bay-Cape Dalhousie-McKinley Bay-Warren Point-Toker Point	
80-0030	RAS	June 05	June 05	Continuous	Herschel Island-Mackenzie Bay-Pullen Island-Tuk	
	RAS	June 09	June 09	Continuous	Tuk-Cape Bathurst-Sachs Harbour-Banks Island Shelf-Sachs Harbour-north of Tuk Peninsula	Flight sequence may be reversed.
	RAS	June 21	June 21	Continuous		Incomplete
	RAS	June 22	June 22	Continuous		Incomplete
	RAS	June 23	June 23	Continuous		Incomplete
	RAS	July 13	July 13	Continuous	Beaufort coast	
	RAS	July 14	July 14	Continuous	Beaufort coast	
	RAS	July 15	July 15	Continuous	Beaufort coast	
	RAS	July 16	July 16	Continuous	Beaufort coast	
	RAS	July 17	July 17	Continuous	Beaufort coast	
	RAS	July 29	July 29	Continuous	Beaufort coast	
	RAS	July 30	July 30	Continuous	Beaufort coast	
	RAS	July 31	July 31	Continuous	Beaufort coast	
	RAS	Aug. 12	Aug. 12	Continuous	Prince of Wales Strait	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
80-0030 Cont'd	RAS	Aug. 13	Aug. 13	Continuous	Prince of Wales Strait-Minto Inlet-Prince Albert Sound-Dolphin & Union Strait-Amundsen Gulf	
	RAS	Aug. 16	Aug. 16	Continuous	Beaufort coast	
	RAS	Aug. 17	Aug. 17	Continuous	Beaufort coast	
	RAS	Aug. 18	Aug. 18	Continuous	Beaufort coast	
	RAS	Sep. 08	Sep. 08	Continuous	Beaufort coast	
	RAS	Sep. 09	Sep. 09	Continuous	Beaufort coast	
81-0023	RAS	June 15	June 16	Put down at Atkinson Point for 1 hour	Inuvik-East Mackenzie Bay-Mackenzie Bay-Kay Point-Herschel Island-Komakuk-King Point-70°01'N, 136°13'W-Atkinson Point-Baillie Islands-Inuvik	
	RAS	June 18	June 18	Continuous	Tuk-70°08'N, 134°30'W-69°05'N, 137°18'W-Tuk	
	SAS	June 19	June 19	Continuous	Niakunak Bay	
	RAS	June 20	June 20	Continuous	Tuk-69°48'N, 136°12'W-70°03'N, 134°25'W-69°43'N, 133°23'W-70°22'N, 131°00'W-Baillie Islands-Franklin Bay-Tuk	
	SAS	June 21	June 21	Continuous	Niakunak Bay	
	RAS	June 23	June 23	Continuous	Tuk-69°43'N, 136°05'W-69°57'N, 134°15'W-69°43'N, 133°25'W-Baillie Islands-Tuk	
	RAS	June 24	June 24	Continuous	Tuk-69°41'N, 135°55'W-70°00'N, 134°42'W-69°44'N, 133°25'W-Baillie Islands-Toker Point-69°47'N, 133°28'W-Tuk	
	RAS	June 25	June 25	Continuous	Tuk-69°43'N, 136°00'W-70°01'N, 134°45'W-69°43'N, 133°28'W-Baillie Islands-Cape Dalhousie-Toker Point-69°42'N, 133°25'W-Tuk	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
81-0023 Cont'd	RAS	June 26	June 26	Continuous	Tuk-Hendrickson Island-69°43'N, 135°58'W-69°58'N, 134°14'W-69°38'N, 133°25'W-Baillie Islands-Cape Dalhousie-Tuk	
	SAS	June 29	June 29	Continuous	Niakunak Bay	
	RAS	July 04	July 04	Continuous	Tuk-Issungnak-69°48'N, 134°00'W-Alerk-Baillie Islands-Cape Dalhousie-Atkinson Point-Hutchison Bay-Warren Point-Toker Point-Tuk	
	SAS	July 06	July 06	Continuous	Niakunak Bay	
	SAS	July 06	July 06	Continuous	Kugmallit Bay	
	SAS	July 08	July 08	Continuous	Kugmallit Bay	
	SAS	July 10	July 10	Continuous	Kugmallit Bay	
	SAS	July 11	July 11	Put down at Shingle Point for 1 hour	Niakunak Bay	
	SAS	July 13	July 13	Continuous	Kugmallit Bay	
	RAS	July 13	July 13	Continuous	Toker Point-Warren Point-Atkinson Point-McKinley Bay-Hutchison Bay	
	SAS	July 16	July 16	Continuous	Kugmallit Bay	
	RAS	July 16	July 16	Continuous	Toker Point-Warren Point-Atkinson Point-McKinley Bay-Tuk	
	SAS	July 18	July 18	Continuous	Kugmallit Bay	
	RAS	July 19	July 19	Continuous	Tuk-Toker Point-Warren Point-Atkinson Point-McKinley Bay-Atkinson Point-Hutchison Bay	
	SAS	July 20	July 20	Continuous	West Mackenzie Bay	
	SAS	July 21	July 21	Continuous	Kugmallit Bay	
	RAS	July 21	July 21	Continuous	Toker Point-Warren Point-Atkinson Point-McKinley Bay	
	SAS	July 23	July 23	Continuous	Kugmallit Bay	
	RAS	July 23	July 23	Continuous	Tuft Point-Warren Point-Atkinson Point-McKinley Bay-Atkinson Point-Hutchison Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
81-0023 Cont'd	SAS	July 25	July 25	Continuous	Kugmallit Bay	
	RAS	July 27	July 27	Continuous	Hutchison Bay-Atkinson Point-McKinley Bay-Atkinson Point-Hutchison Bay-Warren Point-Toker Point-Tuk	
	SAS	July 28	July 28	Continuous	Kugmallit Bay	
	RAS	July 31	July 31	Continuous	Tuk-Toker Point-Warren Point-Atkinson Point-McKinley Bay-Atkinson Point-Warren Point-Hutchison Bay-Tuk	
	RAS	July 31	July 31	Continuous	Shingle Point-Herschel Island-Komakuk-Alaska	
	SAS	Aug. 01	Aug. 01	Continuous	Kugmallit Bay	
	SAS	Aug. 04	Aug. 04	Continuous	East Mackenzie Bay	
	SAS	Aug. 05	Aug. 05	Continuous	Kugmallit Bay	
	RAS	Aug. 05	Aug. 05	Continuous	Tuk-Tuft Point-McKinley Bay-Atkinson Point-Hutchison Bay	
81-0024	SAS	June 15	June 15	Continuous	4 lines from Yukon/NWT border & 2 lines in Kugmallit Bay (see map)	
	SAS	June 16	June 16	Continuous	4 lines north of Richards Island (see map)	
	SAS	June 18	June 18	Continuous	4 lines north of eastern half of Richards Island (see map)	
	SAS	June 19	June 19	Continuous	13 lines north of Tuk Peninsula from Toker Point-Nuvorak Point (see map)	
	SAS	June 20	June 20	Continuous	8 lines north of eastern end of Tuk Peninsula (see map)	
	SAS **INCOMPLETE**	June 21	June 21	Continuous	Lines in Amundsen Gulf	Incomplete
81-0025	Vessel Watch	June 26	Oct. 18	10-minute periods	North Issungnak	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
81-0025 Cont'd	Vessel Watch	July 06	Oct. 27	10-minute periods	Kopanoar	
	Vessel Watch	July 18	Oct. 30	Six 15-minute periods/day	Koakoak	
	Vessel Watch	July 20	Sep. 04	10-minute periods	Killanak	
	Vessel Watch	Sep. 05	Sep. 19	10-minute periods	Orvilruk	
	Vessel Watch	Sep. 20	Sep. 26	10-minute periods	Kenalooak	
	Vessel Watch	Sep. 27	Oct. 22	10-minute periods	Irkaluk	
81-0026	SAS	July 18	July 25	NS	Lines from Alaska/Yukon border-eastern section of Amundsen Gulf & along Banks Island Shelf (see map)	
	RAS	Aug. 01	Aug. 01	Continuous	North of Richards Island & Tuk Peninsula	
	RAS	Aug. 02	Aug. 02	Continuous	North of Richards Island & Tuk Peninsula	
	RAS	Aug. 03	Aug. 03	Continuous	North of Richards Island & Tuk Peninsula	
	RAS	Aug. 04	Aug. 04	Continuous	North of Richards Island & Tuk Peninsula	
	RAS	Aug. 05	Aug. 05	Continuous	North of Richards Island & Tuk Peninsula	
	SAS	Aug. 05	Aug. 17	NS	Lines from King Point-eastern Amundsen Gulf & Prince of Wales Strait & Minto Inlet & Prince Albert Sound (see map)	
	RAS	Aug. 06	Aug. 06	Continuous	North of Richards Island & Tuk Peninsula	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
81-0026 Cont'd	RAS	Aug. 07	Aug. 07	Continuous	North of Richards Island & Tuk Peninsula	
	RAS	Aug. 08	Aug. 08	Continuous	North of Richards Island & Tuk Peninsula	
	SAS	Aug. 19	Aug. 29	NS	Lines from Alaska/Yukon border-Franklin Bay (see map)	
	SAS	Sep. 07	Sep. 14	NS	Lines from Herschel Island-Cape Lyon (see map)	
	INCOMPLETE					
81-0027	RVS	July 31	Sep. 06	NS	NS	
	RAS	July 31	July 31	Continuous	NS	
	RAS	Aug. 05	Aug. 05	Continuous	Area north of Kugmallit Bay	Incomplete
	RAS	Aug. 06	Aug. 06	Continuous	Area north of Kugmallit Bay	Incomplete
	RAS	Aug. 08	Aug. 08	Continuous	Area north of Tuk Peninsula	Incomplete
	RAS	Aug. 10	Aug. 10	Continuous	Area north of Tuk Peninsula	Incomplete
	RAS	Aug. 10	Aug. 10	Continuous	Area north of Richards Island	Incomplete
	RAS	Aug. 13	Aug. 13	Continuous	Area north of Richards Island	Incomplete
	RAS	Aug. 18	Aug. 18	Continuous	Area north of Richards Island	Incomplete
	RAS	Aug. 18	Aug. 18	Continuous	Area north of Kugmallit Bay	Incomplete
	Shore Watch	Aug. 19	Sep. 03	NS	69°04'N, 138°00'W	
	RAS	Aug. 19	Aug. 19	Continuous	Area north of Kugmallit Bay	Incomplete
	Shore Watch	Aug. 23	Sep. 13	NS	69°35'N, 138°51'W	
	RAS	Aug. 23	Aug. 23	Continuous	Area north of Richards Island	Incomplete
	RAS	Aug. 23	Aug. 23	Continuous	Area north of Richards Island	Incomplete
	RAS	Aug. 24	Aug. 24	Continuous	Area north of Richards Island	Incomplete
	RAS	Aug. 25	Aug. 25	Continuous	Area north of Richards Island	Incomplete
	RAS	Sep. 03	Sep. 03	Continuous	Herschel Island area	Incomplete
	RAS	Sep. 03	Sep. 03	Continuous	Herschel Island area	Incomplete
	RAS	Sep. 06	Sep. 06	Continuous	Area north of Komakuk	Incomplete
	RAS	Sep. 07	Sep. 07	Continuous	Herschel Island area	Incomplete
	RAS	Sep. 08	Sep. 08	Continuous	Herschel Island area	Incomplete
	INCOMPLETE					

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
81-0052	RAS	Sep. 12	Sep. 12	Continuous	69°46'N, 141°00'W-69°45'N, 140°51'W-69°50'N, 140°57'W-69°49'N, 141°00'W-Alaska	
	RAS	Sep. 14	Sep. 14	Continuous	69°51'N, 141°00'W-69°49'N, 140°19'W-69°49'N, 140°46'W	
	RAS	Sep. 16	Sep. 16	Continuous	69°38'N, 141°00'W-69°37'N, 139°28'W-69°49'N, 141°00'W-Alaska-70°01'N, 141°00'W-69°59'N, 140°28'W-70°04'N, 140°23'W-70°05'N, 141°00'W-Alaska	
	RAS	Sep. 17	Sep. 17	Continuous	69°43'N, 141°00'W-69°53'N, 140°52'W-Herschel Island-70°04'N, 140°50'W-70°01'N, 141°00'W-Alaska	
	RAS	Sep. 20	Sep. 20	Continuous	69°47'N, 141°00'W-69°46'N, 140°50'W-70°06'N, 140°55'W-69°55'N, 140°48'W-69°58'N, 141°00'W-Alaska	
82-0001	RAS	June 24	June 24	Put down in Tuk for 1.5 hours	Inuvik-Shallow Bay-Shingle Point-Herschel Island-Mackenzie Bay-Issungnak-Kugmallit Bay-Tuk-Toker Point-Warren Point-70°02'N, 132°52'W-Issungnak-Inuvik	
	RAS	June 26	June 26	Continuous	Tuk-69°04'N, 136°18'W-69°56'N, 136°10'W-Issungnak-Baillie Islands-Franklin Bay-Baillie Islands-Issungnak-Tuk	
	RAS	June 28	June 28	Continuous	Tuk-Shallow Bay-69°59'N, 136°25'W-Issungnak-Baillie Islands-Tuk	
	RAS	June 29	June 29	Continuous	Tuk-69°31'N, 136°37'W-Tarsiut-Issungnak-Baillie Islands-Franklin Bay-70°48'N, 127°48'W-Tuk	
	RAS	July 01	July 01	Continuous	Tuk-69°49'N, 136°55'W-Issungnak-Cape Dalhousie-Tuk	
	SAS	July 02	July 02	Continuous	Niakunak Bay	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
82-0001 Cont'd	SAS	July 02	July 02	Continuous	West Mackenzie Bay	
	RAS	July 02	July 02	Continuous	East Mackenzie Bay	
	SAS	July 03	July 03	Continuous	Niakunak Bay	
	RAS	July 05	July 05	Continuous	Kugmallit Bay	
	RAS	July 09	July 09	Continuous	Tuk-Kugmallit Bay-Issungnak-69°54'N, 135°55'W-Issungnak-Baillie Islands-Tuk	
	SAS	July 11	July 11	Continuous	Niakunak Bay	
	SAS	July 12	July 12	Continuous	Kugmallit Bay	
	RAS	July 13	July 13	Continuous	Tuk-Atkinson Point-Cape Dalhousie-Baillie Islands-Amundsen Gulf-Baillie Islands-Cape Dalhousie-Pullen Island-Garry Island-East Mackenzie Bay-Tuk	
	SAS	July 14	July 14	Continuous	Niakunak Bay	
	SAS	July 14	July 14	Continuous	Kugmallit Bay	
	SAS	July 16	July 16	Continuous	Kugmallit Bay	
	RAS	July 16	July 16	Continuous	Tuk-Warren Point-Hutchison Bay-Atkinson Point-McKinley Bay-Warren Point-Tuk	
	SAS	July 18	July 18	Continuous	Kugmallit Bay	
	RAS	July 18	July 18	Continuous	Tuft Point-Atkinson Point-Tuft Point	
	SAS	July 19	July 19	Continuous	Kugmallit Bay	
	RAS	July 19	July 19	Continuous	Toker Point-Tuft Point-Hutchison Bay-Atkinson Point-McKinley Bay-Hendrickson Island	
82-0008	RVS	NS	NS	NS	NS	
	RAS	Aug. 01	Aug. 01	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 07	Aug. 07	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 08	Aug. 08	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 14	Aug. 14	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 16	Aug. 16	Continuous	Area north of Yukon coast	Incomplete

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
82-0008 Cont'd	RAS	Aug. 16	Aug. 16	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 18	Aug. 18	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 19	Aug. 19	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 19	Aug. 19	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 23	Aug. 23	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 24	Aug. 24	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 24	Aug. 24	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 31	Aug. 31	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 31	Aug. 31	Continuous	Area north of Yukon coast	Incomplete
	INCOMPLETE					
82-0009	RAS	Aug. 16	Aug. 16	Continuous	Area northeast of Herschel Island	Incomplete
	RAS	Aug. 17	Aug. 17	Continuous	Cape Bathurst-Cape Dalhousie	Incomplete
	RAS	Aug. 18	Aug. 18	Continuous	Area northeast of Herschel Island	Incomplete
	RAS	Aug. 24	Aug. 24	Continuous	Area northeast of Herschel Island	Incomplete
	RAS	Aug. 25	Aug. 25	Continuous	Cape Bathurst-Cape Dalhousie	Incomplete
	RAS	Sep. 04	Sep. 04	Continuous	Area northeast of Herschel Island	Incomplete
	RAS	Sep. 05	Sep. 05	Continuous	Area northeast of Herschel Island	Incomplete
	INCOMPLETE					
82-0010	SAS	Aug. 18	Aug. 18	Continuous	6 lines from east of Komakuk-west of Shingle Point (see map)	
	SAS	Aug. 19	Aug. 19	Continuous	Next 8 lines eastward from Aug. 17 (see map)	
	SAS	Aug. 22	Aug. 22	Continuous	6 lines from Pelly Island-north of Hendrickson Island (see map)	
	SAS	Aug. 23	Aug. 23	Continuous	6 lines from west of Tuk-McKinley Bay (see map)	
	SAS	Aug. 24	Aug. 24	Continuous	5 easternmost lines (see map)	
	SAS	Sep. 05	Sep. 05	Continuous	6 westernmost lines (see map)	
	SAS	Sep. 09	Sep. 09	Continuous	6 lines from Hooper Island-Warren Point (see map)	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
82-0010 Cont'd	SAS	Sep. 12	Sep. 12	Continuous	7 lines from Warren Point-Cape Dalhousie (see map)	
	SAS	Sep. 13	Sep. 13	Continuous	10 lines from east of Kay Point-Pelly Island spit (see map)	
82-0029	Vessel Watch	July 01	NS	10-minute periods	McKinley Bay	
	Vessel Watch	July 15	NS	10-minute periods	Kiggavik	
	Vessel Watch	July 17	NS	10-minute periods	Kenalooak	
	Vessel Watch	July(?)	NS	10-minute periods	Nerlerk	
	Vessel Watch	July(?)	NS	10-minute periods	Irkaluk	
	Vessel Watch	Sep.(?)	NS	10-minute periods	Orviluk	
82-0049	RAS	Aug. 02	Aug. 02	Continuous	Area north of coast longitudes 140°00'W-141°00'W	
	RAS	Aug. 05	Aug. 05	Continuous	70°48'N, 141°00'W-70°43'N, 140°10'W-70°27'N, 140°40'W-70°26'N, 141°00'W-Alaska	
	RAS	Aug. 06	Aug. 06	Continuous	Area north of coast longitudes 140°00'W-141°00'W	
	RAS	Aug. 07	Aug. 07	Continuous	Area north of coast longitudes 140°00'W-141°00'W	
	RAS	Aug. 15	Aug. 15	Continuous	70°59'N, 141°00'W-70°10'N, 140°15'W-72°00'N, 140°30'W-71°08'N, 141°00'W-Alaska	
	RAS	Aug. 16	Aug. 16	Continuous	Alaska-69°36'N, 140°32'W-70°29'N, 140°40'W-70°29'N, 141°00'W-Alaska	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
82-0049 Cont'd	RAS	Aug. 18	Aug. 18	Continuous	Alaska-area north of coast longitudes 139°10'W-141°00'W-Herschel Island-Alaska	
	RAS	Aug. 20	Aug. 20	Continuous	70°29'N, 141°00'W-70°28'N, 140°15'W-71°09'N, 140°15'W-71°09'N, 140°40'W-70°30'N, 140°40'W-Alaska	
	RAS	Aug. 25	Aug. 25	Continuous	Alaska-area north of coast longitudes 140°25'W-141°00'W-Alaska	
	RAS	Aug. 28	Aug. 28	Continuous	Alaska-area north of coast longitudes 140°05'W-141°00'W-Alaska	
	RAS	Sep. 02	Sep. 02	Continuous	Alaska-area near coast longitudes 140°05'W-141°00'W-Alaska	
	RAS	Sep. 04	Sep. 04	Continuous	Alaska-area north of coast longitudes 139°55'W-141°00'W-Alaska	
	RAS	Sep. 11	Sep. 11	Continuous	Alaska-area north of coast longitudes 140°17'W-141°00'W-Alaska	
	RAS	Sep. 14	Sep. 14	Continuous	Alaska-area north of coast longitudes 140°27'W-141°00'W-Alaska	
	RAS	Sep. 15	Sep. 15	Continuous	69°58'N, 141°00'W-69°45'N, 139°50'W-70°28'N, 139°55'W-70°33'N, 140°50'W-69°58'N, 141°00'W-Alaska	
	RAS	Sep. 16	Sep. 16	Continuous	Alaska-area north of coast longitudes 139°54'W-141°00'W-Alaska	
	RAS	Sep. 24	Sep. 24	Continuous	69°48'N, 141°00'W-69°48'N, 140°37'W-69°59'N, 141°00'W-Alaska	
	RAS	Oct. 13	Oct. 13	Continuous	Alaska-area north of coast longitudes 140°05'W-141°00'W-Alaska	
	RAS	Oct. 14	Oct. 14	Continuous	Alaska-area north of coast longitudes 139°00'W-141°00'W-Alaska	
	RAS	Oct. 15	Oct. 15	Continuous	70°00'N, 141°00'W-Herschel Island-King Point-69°58'N, 136°00'W-Herschel Island-71°53'N, 139°20'W-69°55'N, 141°00'W-Alaska	Flight sequence may be reversed.

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
83-0024	RVS	NS	NS	NS	NS	
	RAS	Aug. 07	Aug. 07	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 07	Aug. 07	Continuous	Area north of Herschel Island	Incomplete
	RAS	Aug. 09	Aug. 09	Continuous	Area north of Herschel Island	Incomplete
	RAS	Aug. 15	Aug. 15	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 17	Aug. 17	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 17	Aug. 17	Continuous	Area along Yukon coast	Incomplete
	RAS	Aug. 18	Aug. 18	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 18	Aug. 18	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 22	Aug. 22	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 22	Aug. 22	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 26	Aug. 26	Continuous	Area along Yukon coast	Incomplete
	RAS	Aug. 26	Aug. 27	Continuous	Area along Yukon coast	Incomplete
	RAS	Aug. 28	Aug. 28	Continuous	Area north of Yukon coast	Incomplete
	RAS	Aug. 31	Aug. 31	Continuous	Area north of Richards Island	Incomplete
	RAS	Sep. 01	Sep. 01	Continuous	Area north of Richards Island	Incomplete
	INCOMPLETE					
83-0025	RAS	June 22	June 22	Continuous	Tuk-Mackenzie Bay-King Point-Mackenzie Bay-Issungnak-east of Baillie Islands-Tuk	
	RAS	June 24	June 24	Continuous	Tuk-Mackenzie Bay-Herschel Island-Mackenzie Bay-along ice edge-Baillie Islands-along lead-north of Tuft Point-Tuk	
	RAS	June 26	June 26	Continuous	Tuk-Mackenzie Bay-along ice edge-Baillie Islands-Tuk	
	SAS	June 28	June 28	Continuous	Niakunak Bay	
	RAS	June 30	June 30	Continuous	Tuk-Hooper Island-Warren Point-Baillie Islands-along lead-north of Warren Point-Kugmallit Bay-Tuk	
	SAS	July 02	July 02	Continuous	Niakunak Bay	
	SAS	July 03	July 03	Continuous	Kugmallit Bay	

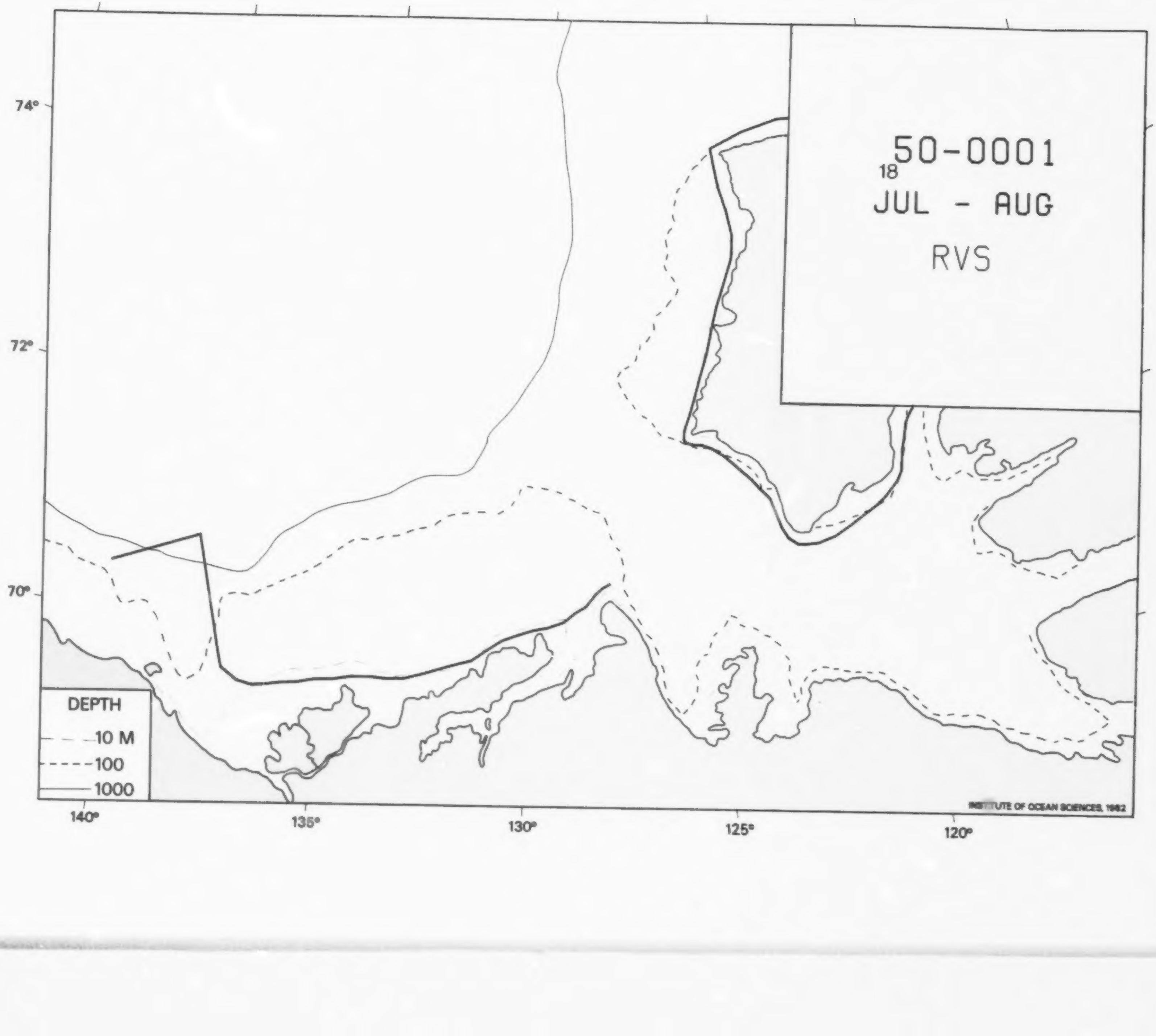
DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
83-0025 Cont'd	SAS	July 06	July 06	Continuous	Niakunak Bay	
	SAS	July 07	July 07	Continuous	Kugmallit Bay	
	SAS	July 10	July 10	Continuous	Niakunak Bay	
	SAS	July 11	July 11	Continuous	Kugmallit Bay	
	SAS	July 15	July 15	Continuous	Kugmallit Bay	
83-0026	SAS	Aug. 19	Aug. 19	Continuous	6 westernmost lines (see map)	
	SAS	Aug. 20	Aug. 20	Continuous	2 lines north of Tuft Point & Warren Point (see map)	
	SAS	Aug. 22	Aug. 22	Continuous	6 lines from east of King Point-west of Hooper Island (see map)	
	SAS	Aug. 23	Aug. 23	Continuous	2 lines north of Richards Island & 2 lines from east of Hutchison Bay-Atkinson Point (see map)	
	SAS	Aug. 24	Aug. 24	Continuous	4 lines from east of McKinley Bay-east of Cape Dalhousie (see map)	
	SAS	Sep. 06	Sep. 06	Continuous	9 westernmost lines (see map)	
	SAS	Sep. 08	Sep. 08	Continuous	8 lines from west of the Yukon/NWT border-Toker Point (see map)	
	SAS	Sep. 09	Sep. 09	Continuous	6 lines from Warren Point-Cape Dalhousie (see map)	
	SAS	Sep. 11	Sep. 11	Continuous	2 easternmost lines (see map)	
83-0028	RAS	May 09	May 09	Continuous	Area north of Yukon coast longitudes 138°00'W-141°00'W-Alaska	
	RAS	May 11	May 11	Continuous	70°10'N, 141°00'W-70°10'N, 138°30'W-Herschel Island-71°00'N, 141°00'W-Alaska	
	RAS	Aug. 02	Aug. 02	Continuous	Area north of Yukon coast longitudes 138°30'W-141°00'W-Alaska	

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED START	STOP	INTERVAL	GEOGRAPHIC LOCATION	REMARKS
83-0028 Cont'd	RAS	Aug. 03	Aug. 03	Continuous	70°23'N, 141°00'W-70°31'N, 140°20'W-71°10'N, 140°05'W-71°10'N, 140°35'W-70°31'N, 140°45'W-70°31'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Aug. 05	Aug. 05	Continuous	70°17'N, 141°00'W-70°19'N, 140°30'W-71°33'N, 140°30'W-71°10'N, 140°45'W-71°10'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Aug. 08	Aug. 08	Continuous	69°53'N, 141°00'W-70°00'N, 140°25'W-70°30'N, 140°00'W-71°00'N, 140°20'W-71°00'N, 140°50'W-70°28'N, 140°50'W-70°28'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Aug. 09	Aug. 09	Continuous	Area north of Yukon coast longitudes 140°00'W-141°00'W-Alaska	
	RAS	Aug. 10	Aug. 10	Continuous	Area north of Yukon coast longitudes 140°15'W-141°00'W-Alaska	
	RAS	Aug. 18	Aug. 18	Continuous	71°10'N, 141°00'W-71°10'N, 140°40'W-72°00'N, 140°40'W-72°00'N, 140°10'W-71°15'N, 140°15'W-71°02'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Aug. 20	Aug. 20	Continuous	70°30'N, 141°00'W-70°30'N, 140°10'W-71°10'N, 140°15'W-71°12'N, 140°43'W-70°30'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Aug. 21	Aug. 21	Continuous	Area north of Yukon coast longitudes 140°00'W-141°00'W-Alaska	
	RAS	Aug. 23	Aug. 23	Continuous	70°29'N, 141°00'W-70°30'N, 140°28'W-71°10'N, 140°28'W-70°30'N, 140°32'W-70°30'N, 141°00'W-Alaska	
	RAS	Aug. 30	Aug. 30	Continuous	69°40'N, 141°00'W-Clarence Lagoon-71°07'N, 140°00'W-71°00'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Aug. 31	Aug. 31	Continuous	70°10'N, 141°00'W-70°30'N, 140°00'W-71°10'N, 140°30'W-71°10'N, 140°45'W-70°30'N, 140°55'W-70°30'N, 141°00'W-Alaska	Flight sequence may be reversed.

DATA SET I.D.	SURVEY TYPE	TIME SAMPLED			GEOGRAPHIC LOCATION	REMARKS
		START	STOP	INTERVAL		
83-0028 Cont'd	RAS	Sep. 06	Sep. 06	Continuous	70°23'N, 141°00'W-70°29'N, 140°07'W-72°00'N, 140°20'W-72°00'N, 140°35'W-70°30'N, 140°35'W-70°30'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Sep. 07	Sep. 07	Continuous	69°37'N, 141°00'W-70°31'N, 140°40'W-69°35'N, 140°20'W-69°59'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Sep. 10	Sep. 10	Continuous	Area north of Yukon coast longitudes 140°00'W-141°00'W-Alaska	
	RAS	Oct. 02	Oct. 02	Continuous	69°42'N, 141°00'W-69°40'N, 140°45'W-70°30'N, 140°10'W-70°31'N, 141°00'W-Alaska	Flight sequence may be reversed.
	RAS	Oct. 05	Oct. 05	Continuous	70°20'N, 141°00'W-70°20'N, 140°40'W-70°30'N, 140°40'W-70°30'N, 141°00'W-Alaska	Flight sequence may be reversed.

9. MAPS

Survey coverage maps are organized chronologically, by year (I.D. numbers) and bimonthly intervals, starting with January-February. Separate maps are used for different types of surveys. Only reconnaissance aerial surveys, systematic aerial surveys, and reconnaissance vessel surveys are mapped.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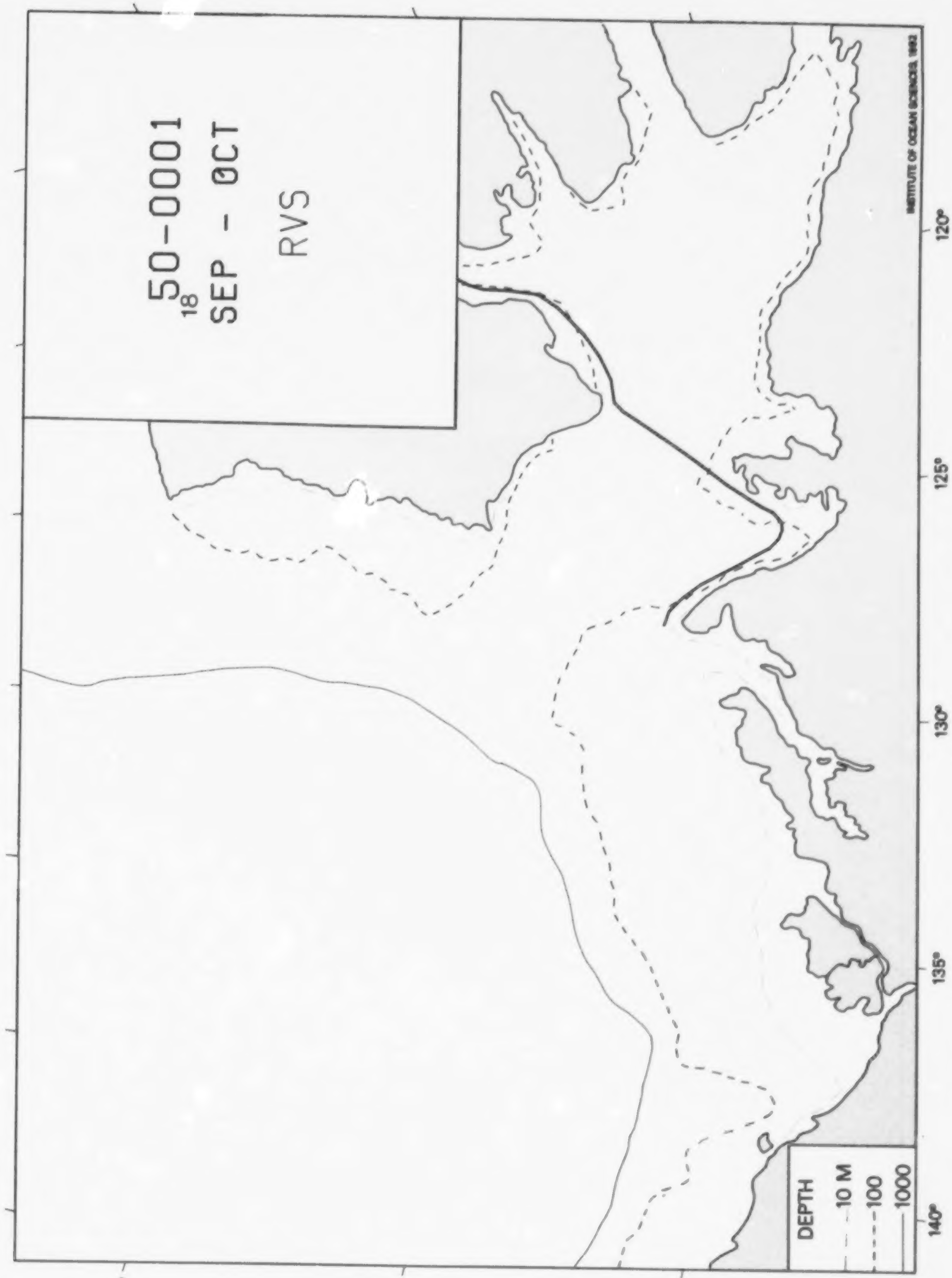
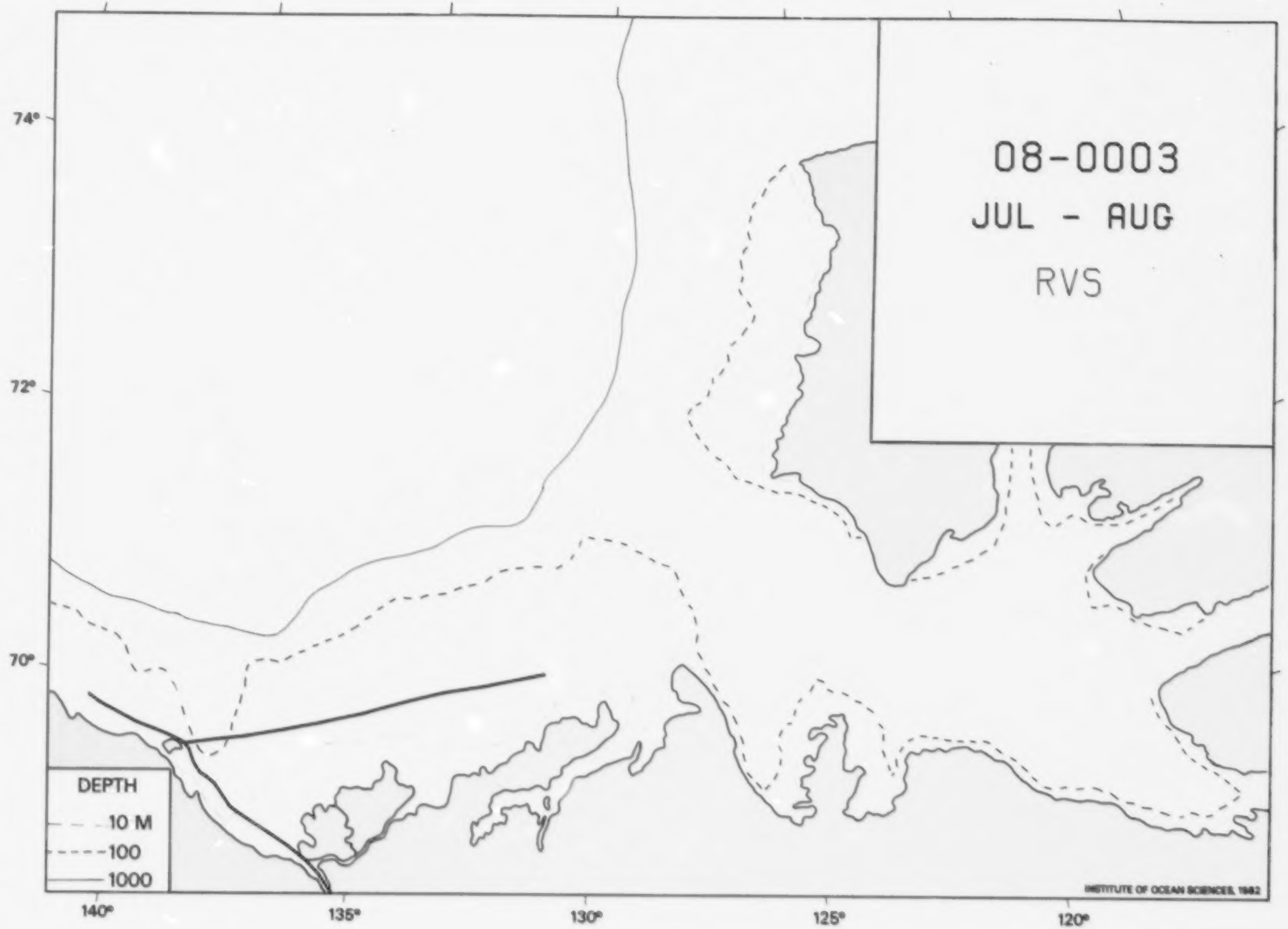
JUL - AUG
RVS
74°
72°
70°
140°
135°
130°
125°
120°
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982


50-0001
18
SEP - OCT
RVS
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES 1982
74°
72°
70°
140°
135°
130°
125°
120°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JUL - AUG
RVS
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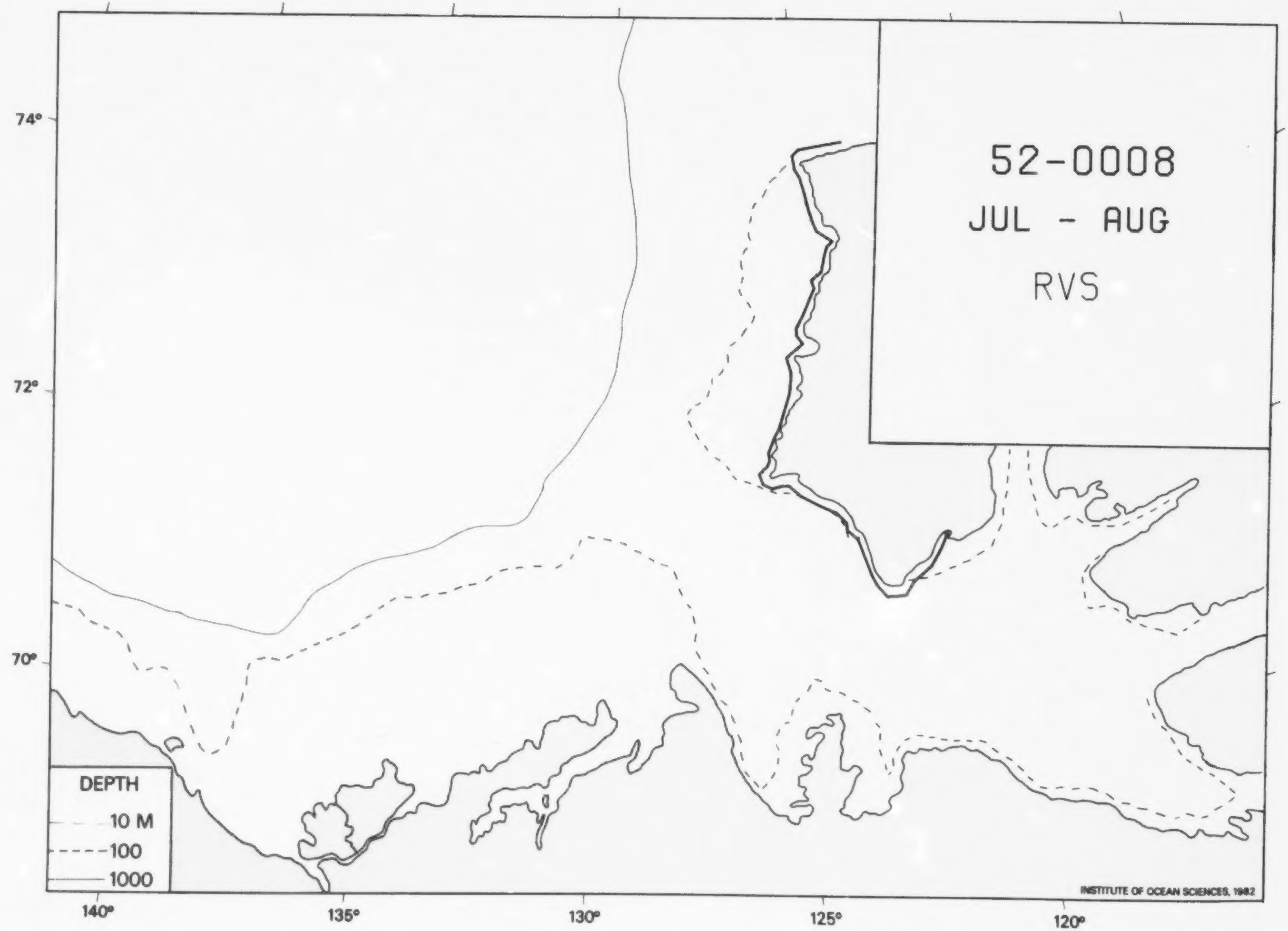
70°
140°
135°
130°
125°
120°
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982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JUL - AUG
RVS
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140°
135°
130°
125°
120°
DEPTH
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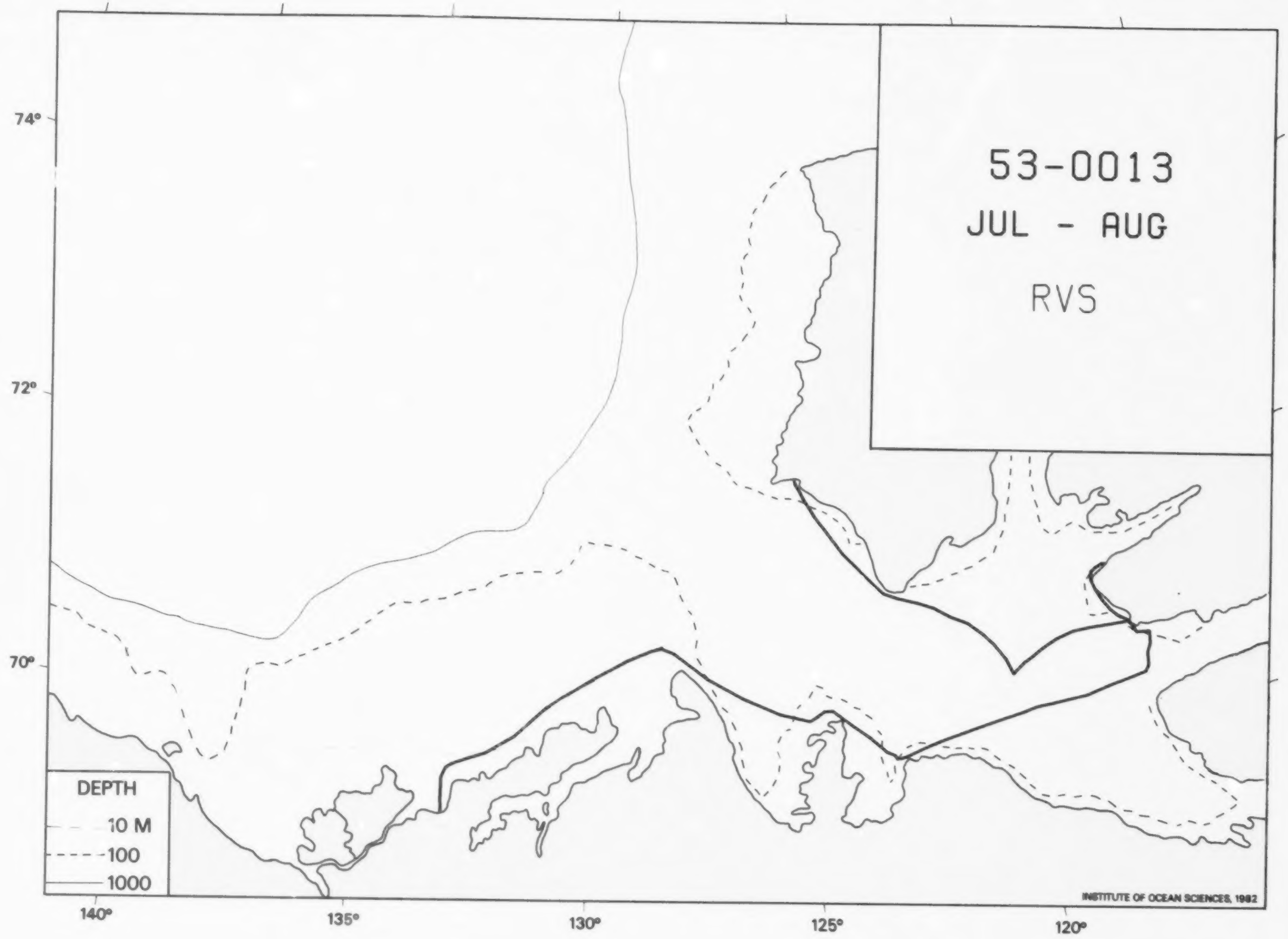
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982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JUL - AUG
RVS
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72°
70°
140°
135°
130°
125°
120°
DEPTH
10 M
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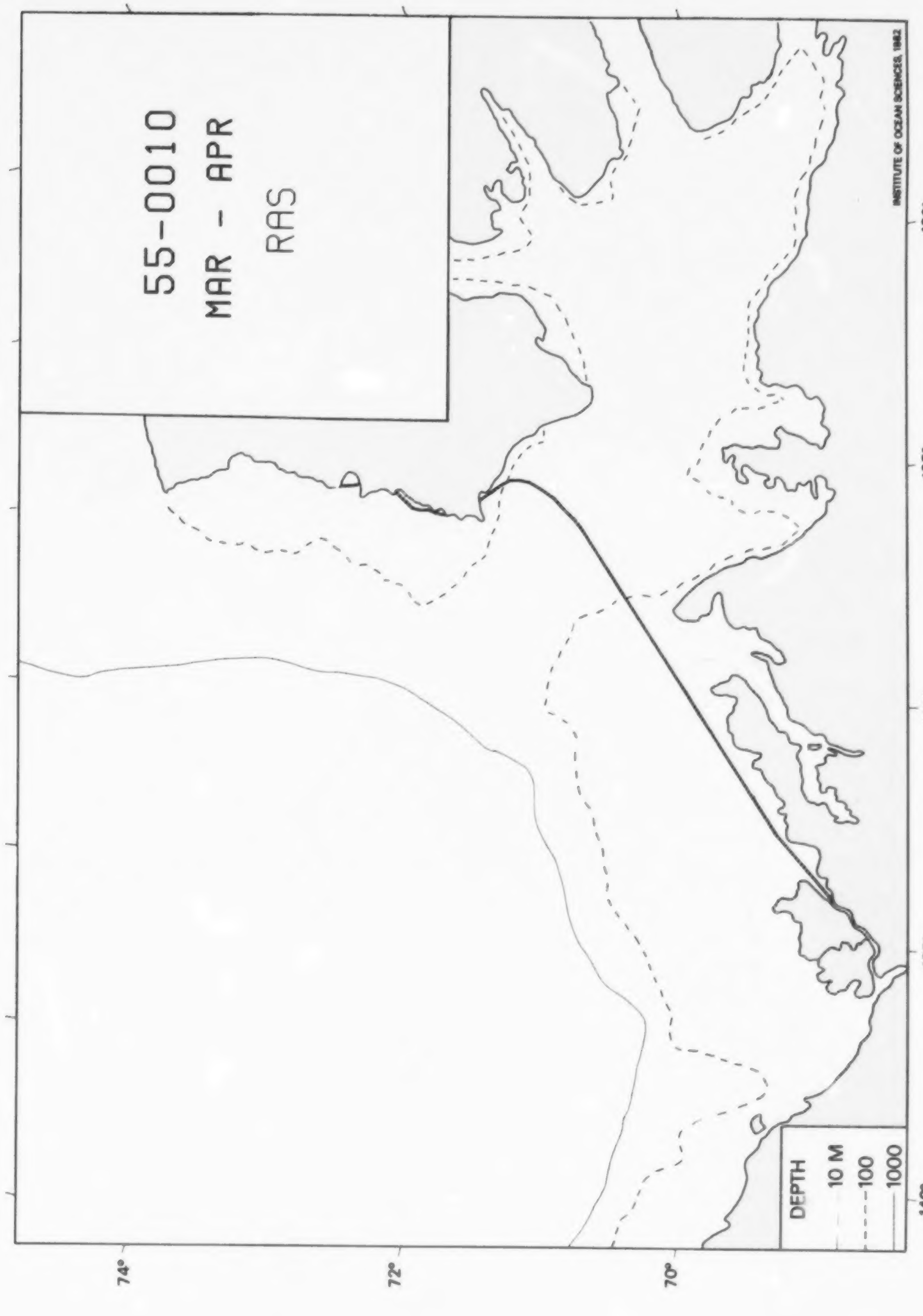
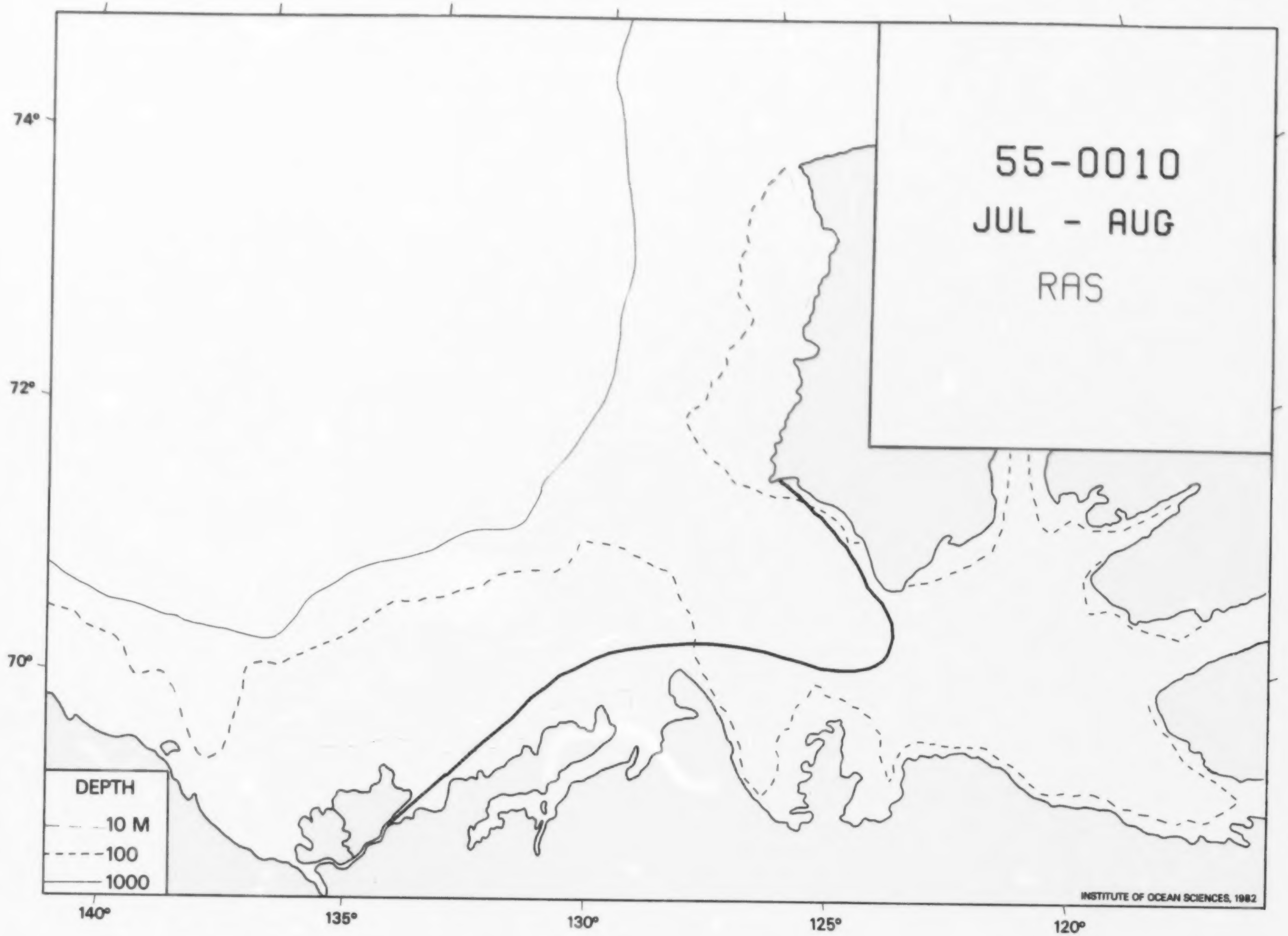
INSTITUTE OF OCEAN SCIENCES, 1982


55-0010
MAR - APR
RAS
DEPTH
10 M
100
1000
INSTITUTE OF OCEAN SCIENCES, 1982
120°
125°
130°
135°
140°
74°
72°
70°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JUL - AUG
RAS
74°
72°
70°
DEPTH
10 M
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140°
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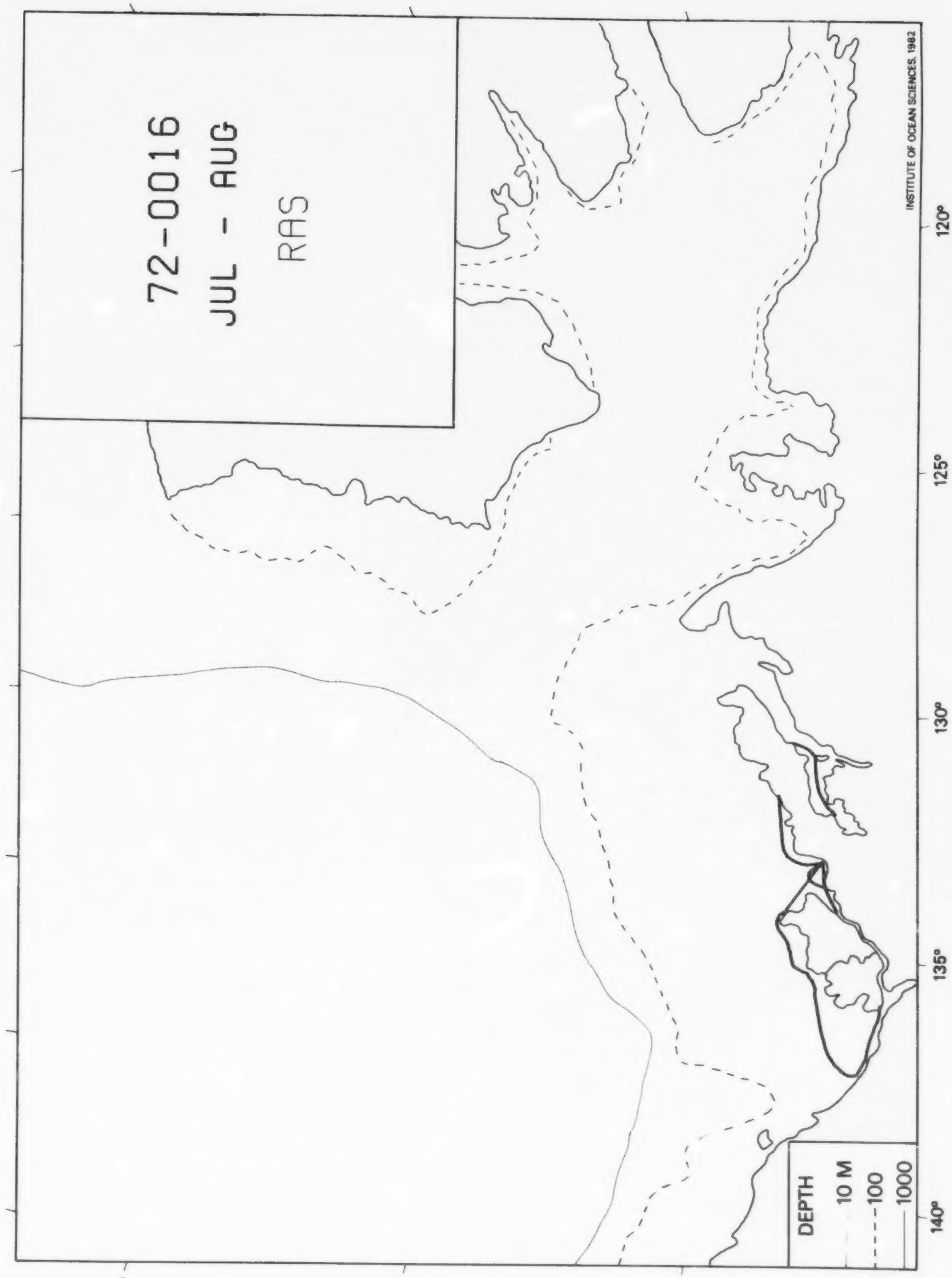
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JUL - AUG
RAS
DEPTH
10 M
100
1000
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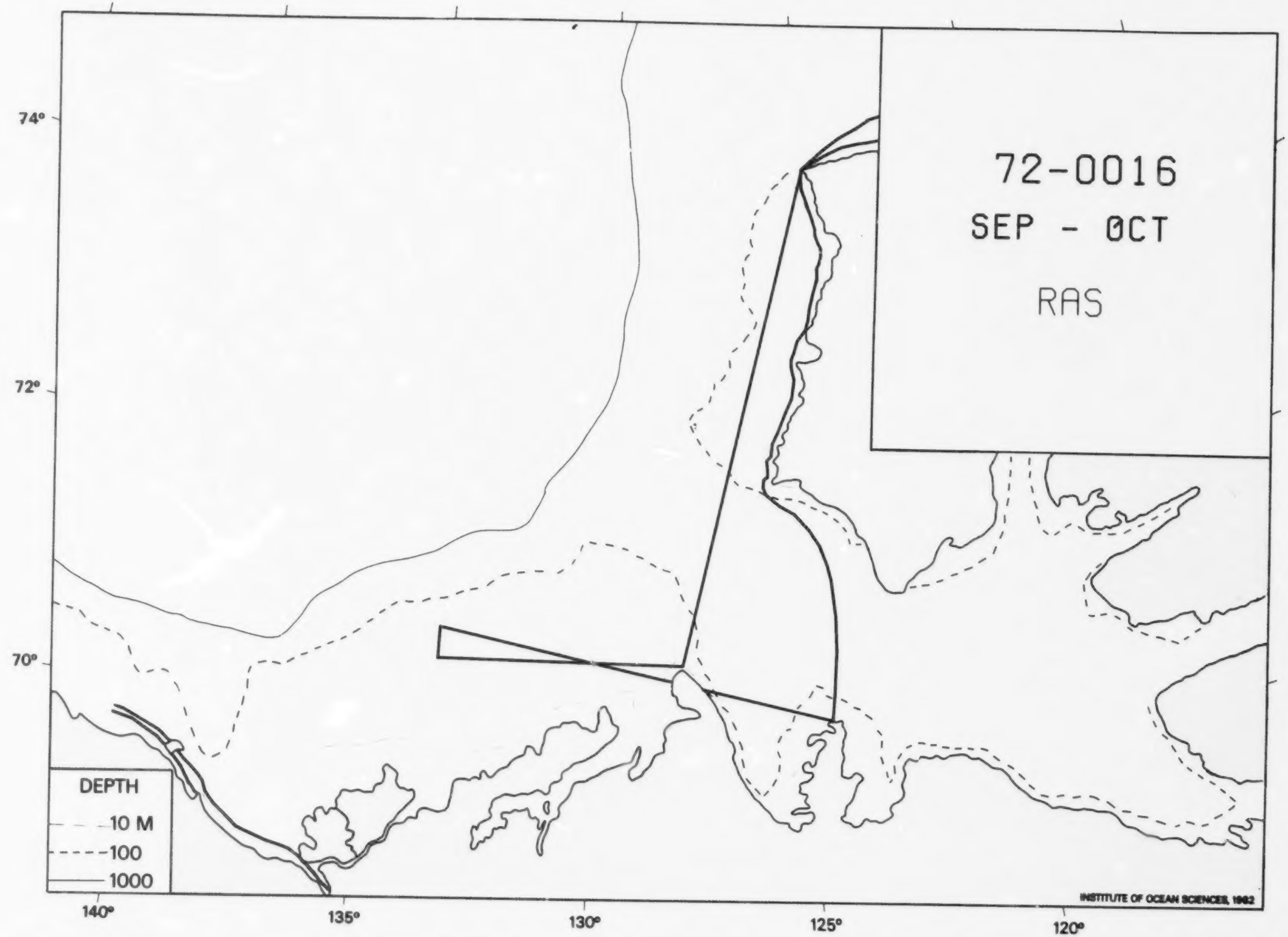
120°
125°
130°
135°
140°
74°
72°
70°


72-0016
SEP - OCT
RAS
74°
72°
70°
140°
135°
130°
125°
120°
DEPTH
10 M
100
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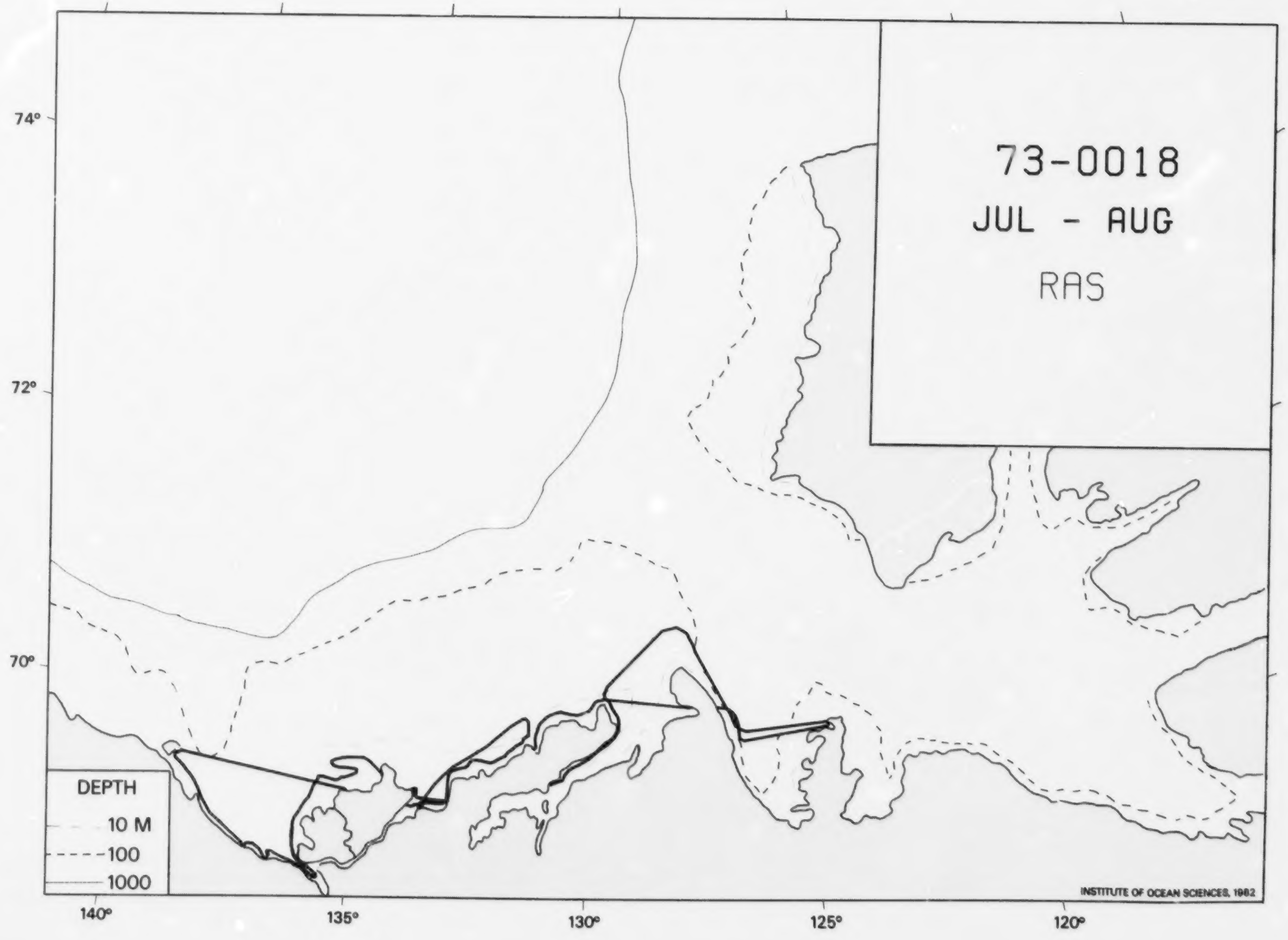
INSTITUTE OF OCEAN SCIENCES, 1982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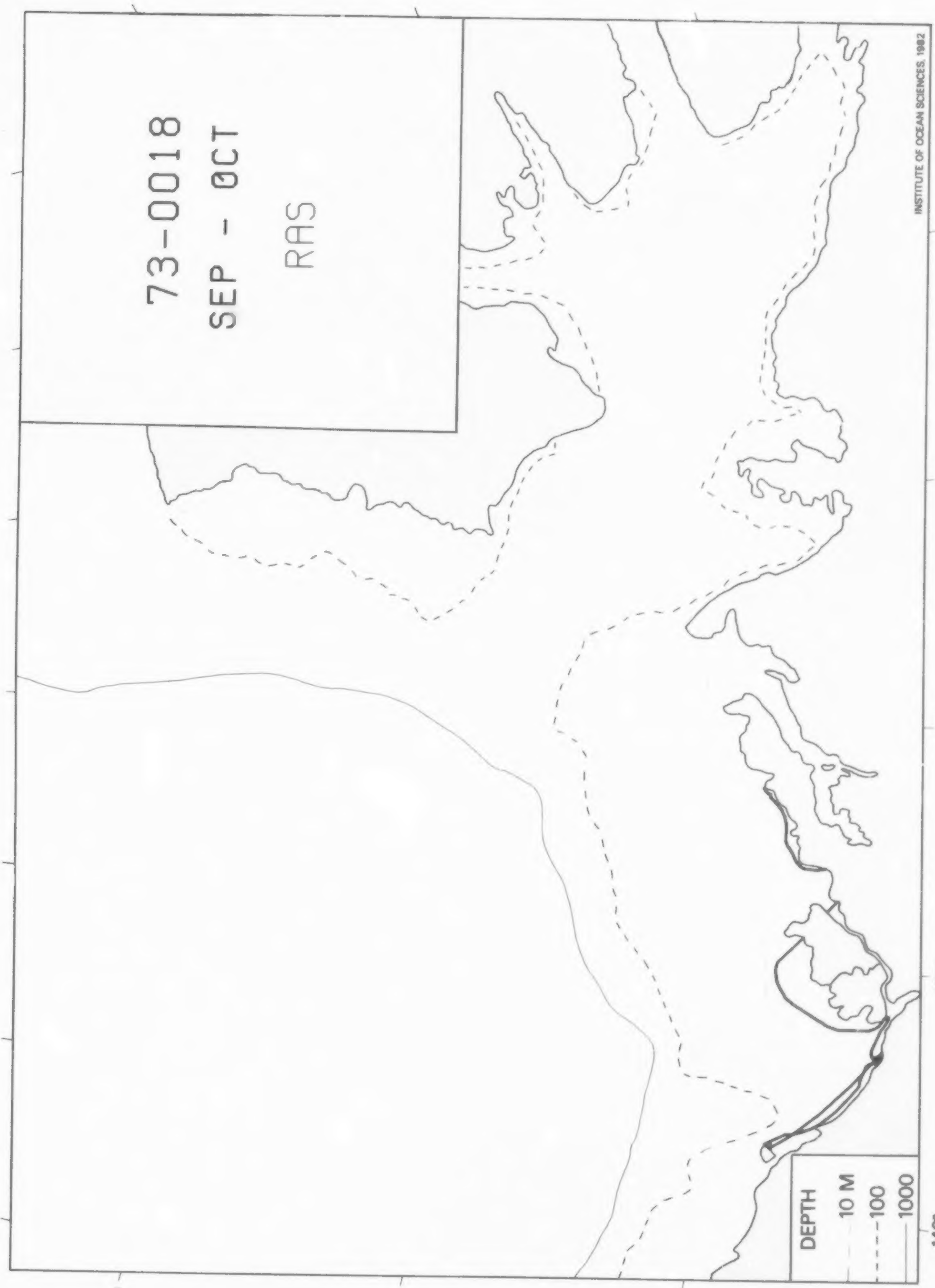
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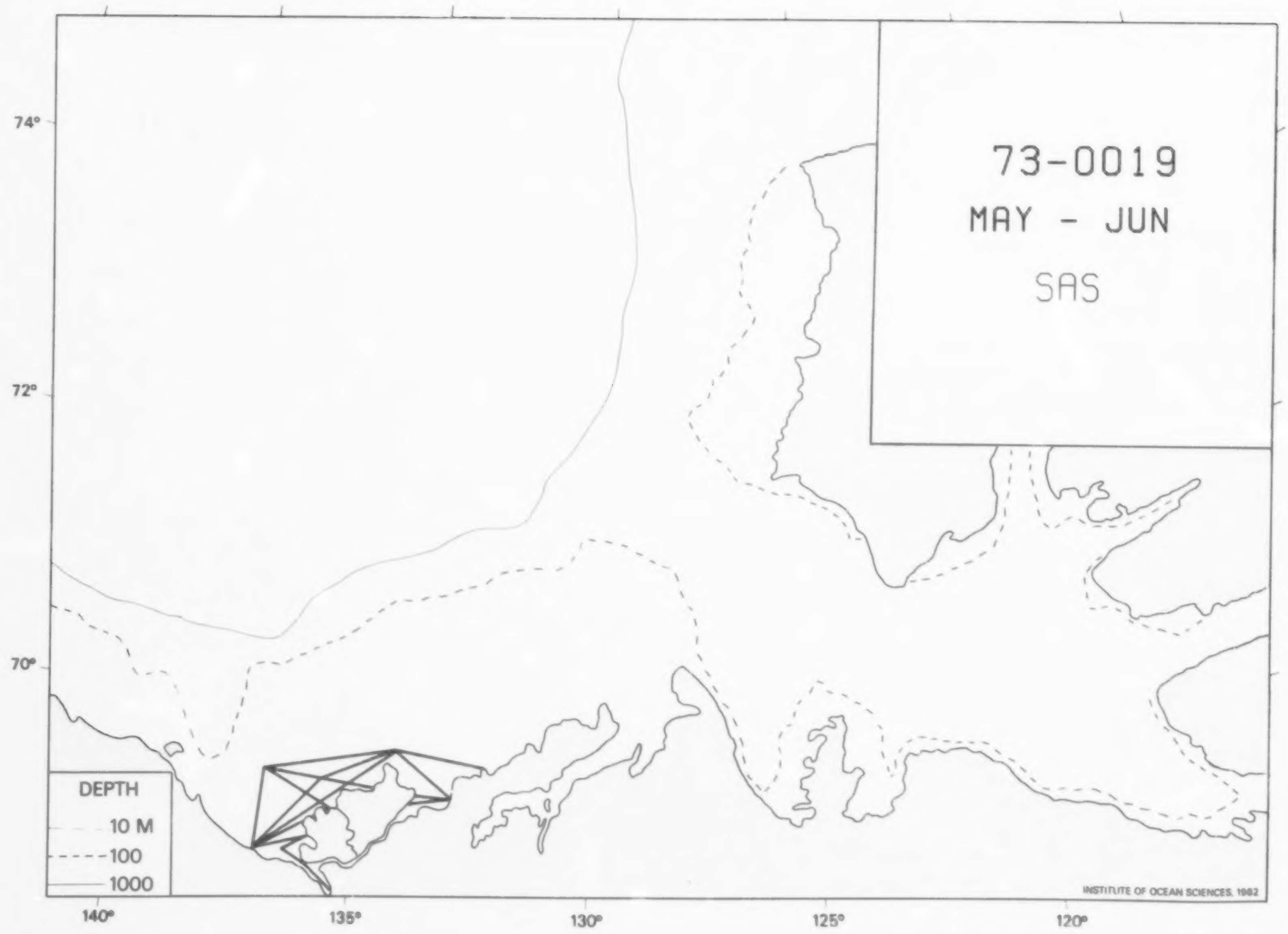
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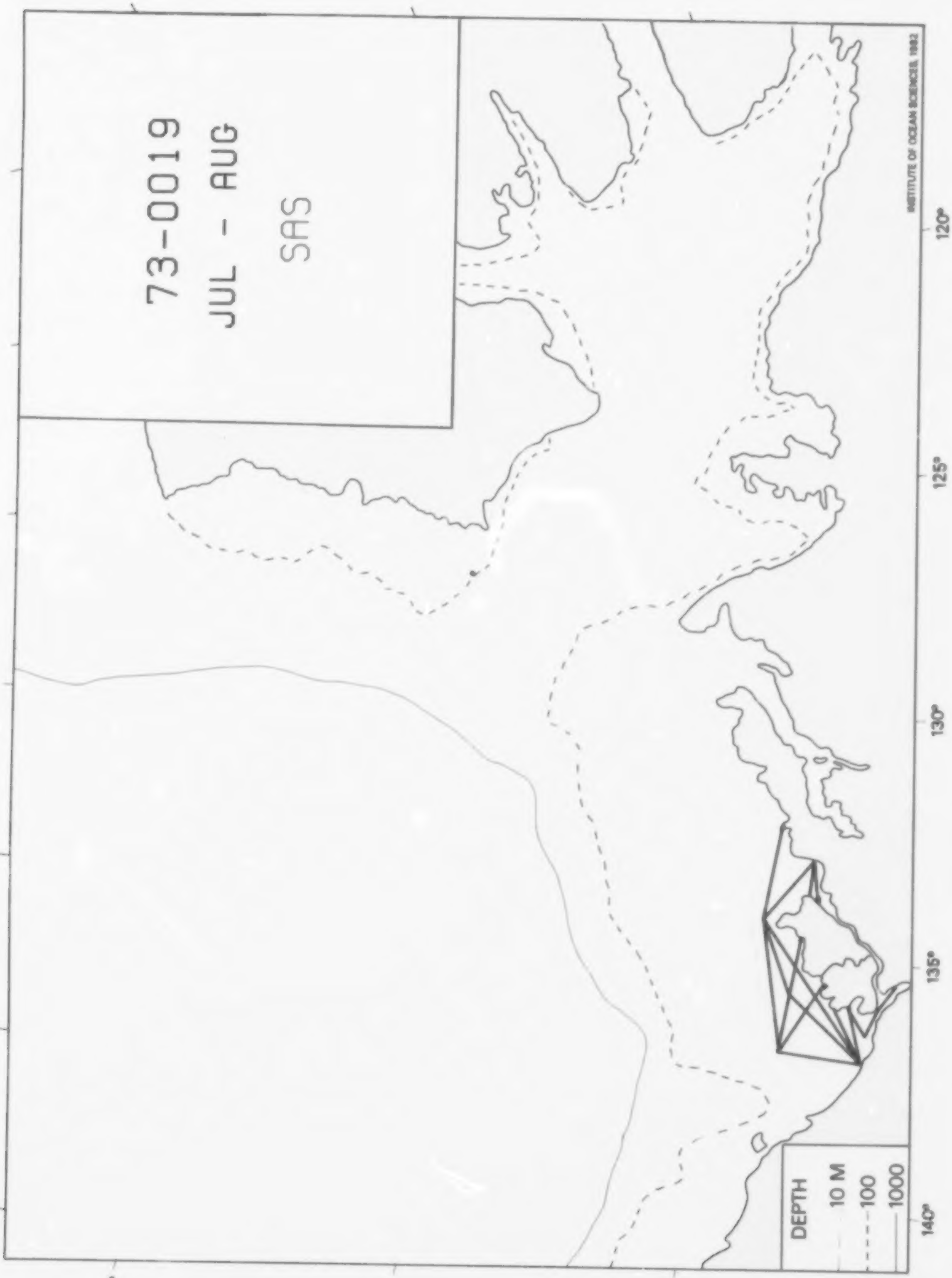
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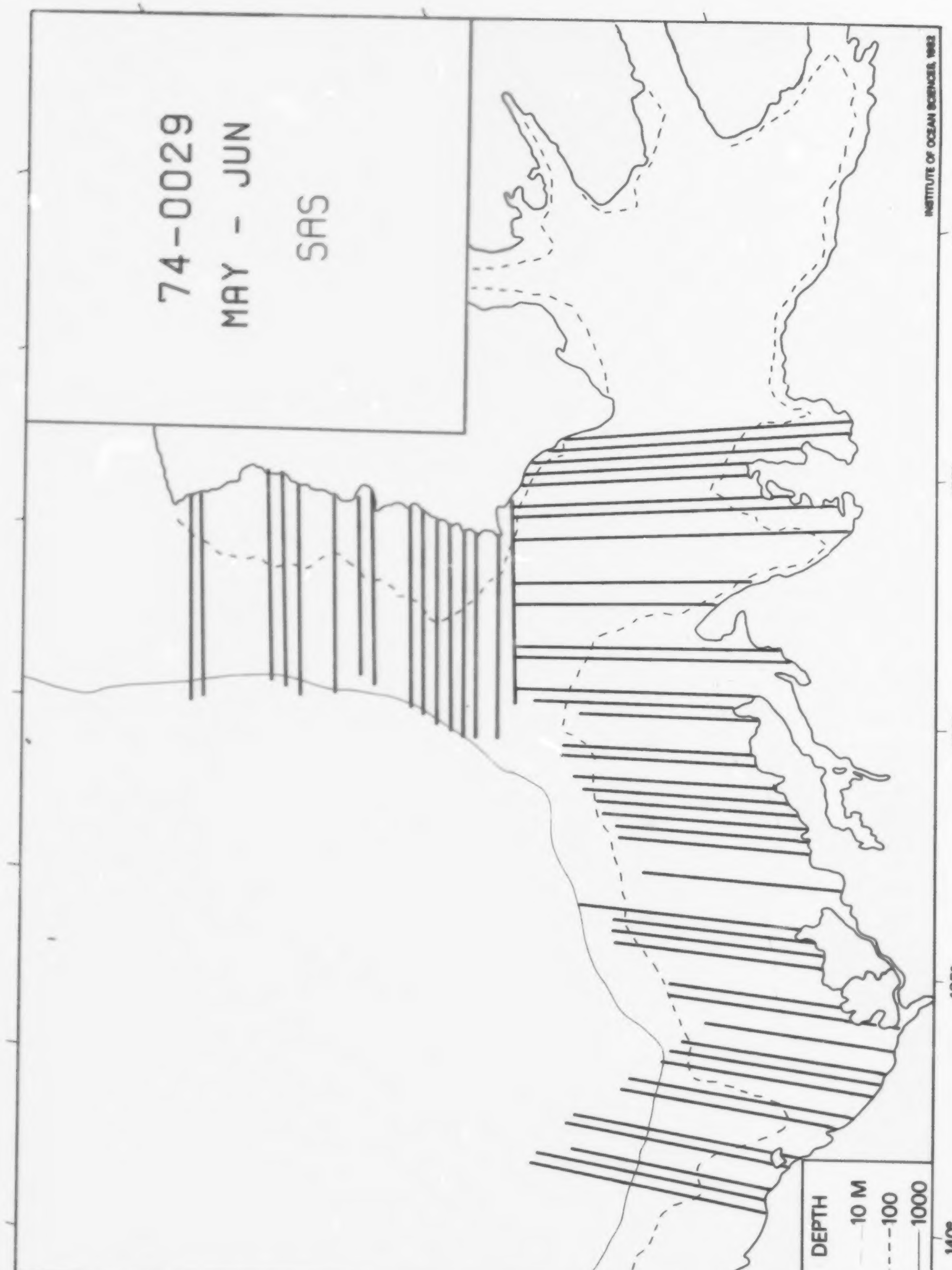
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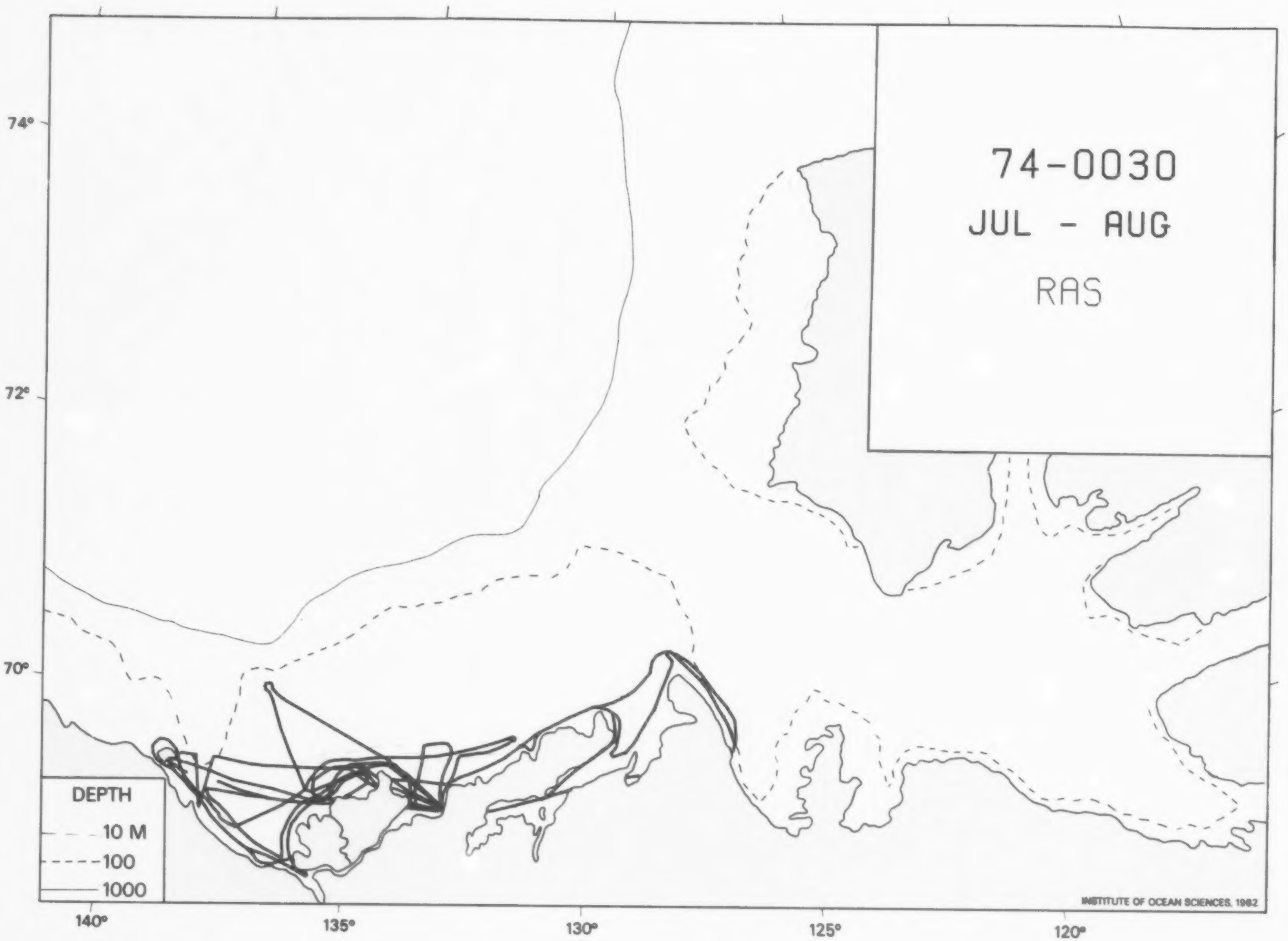
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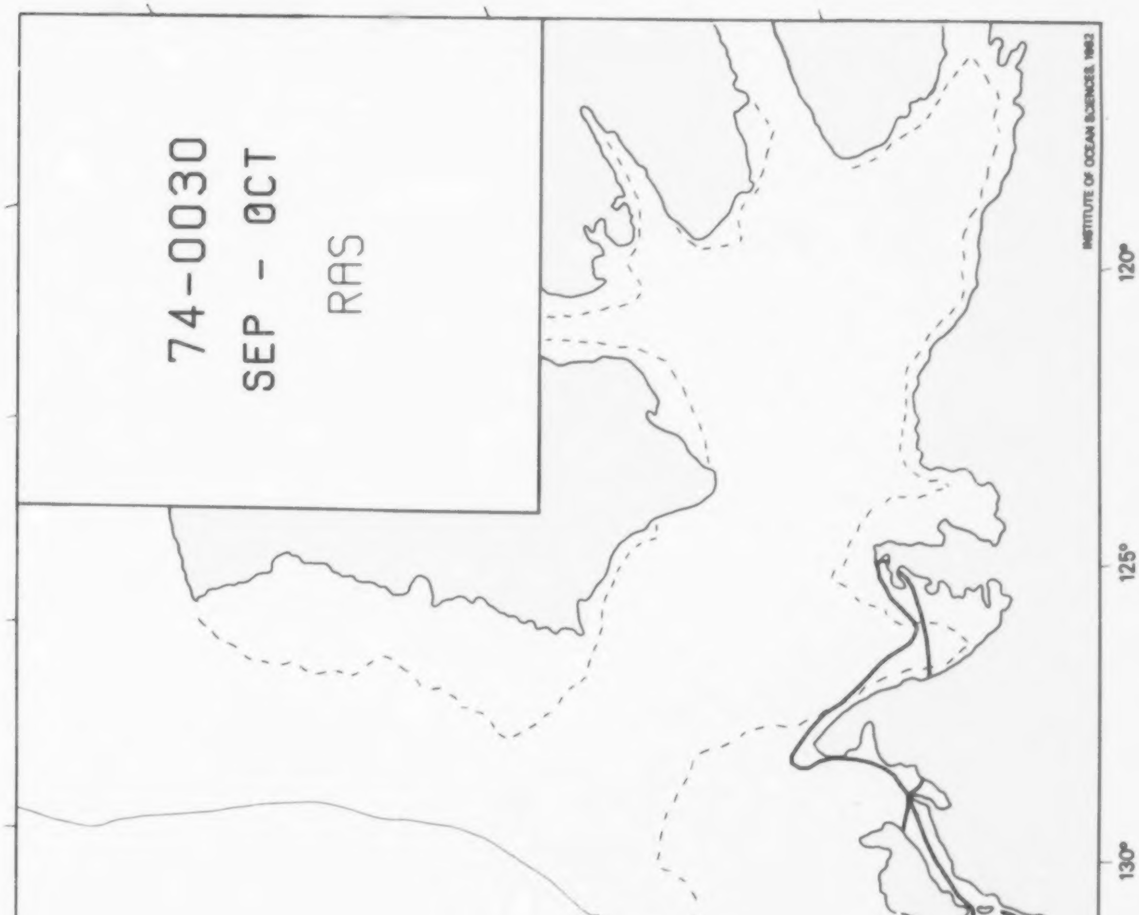
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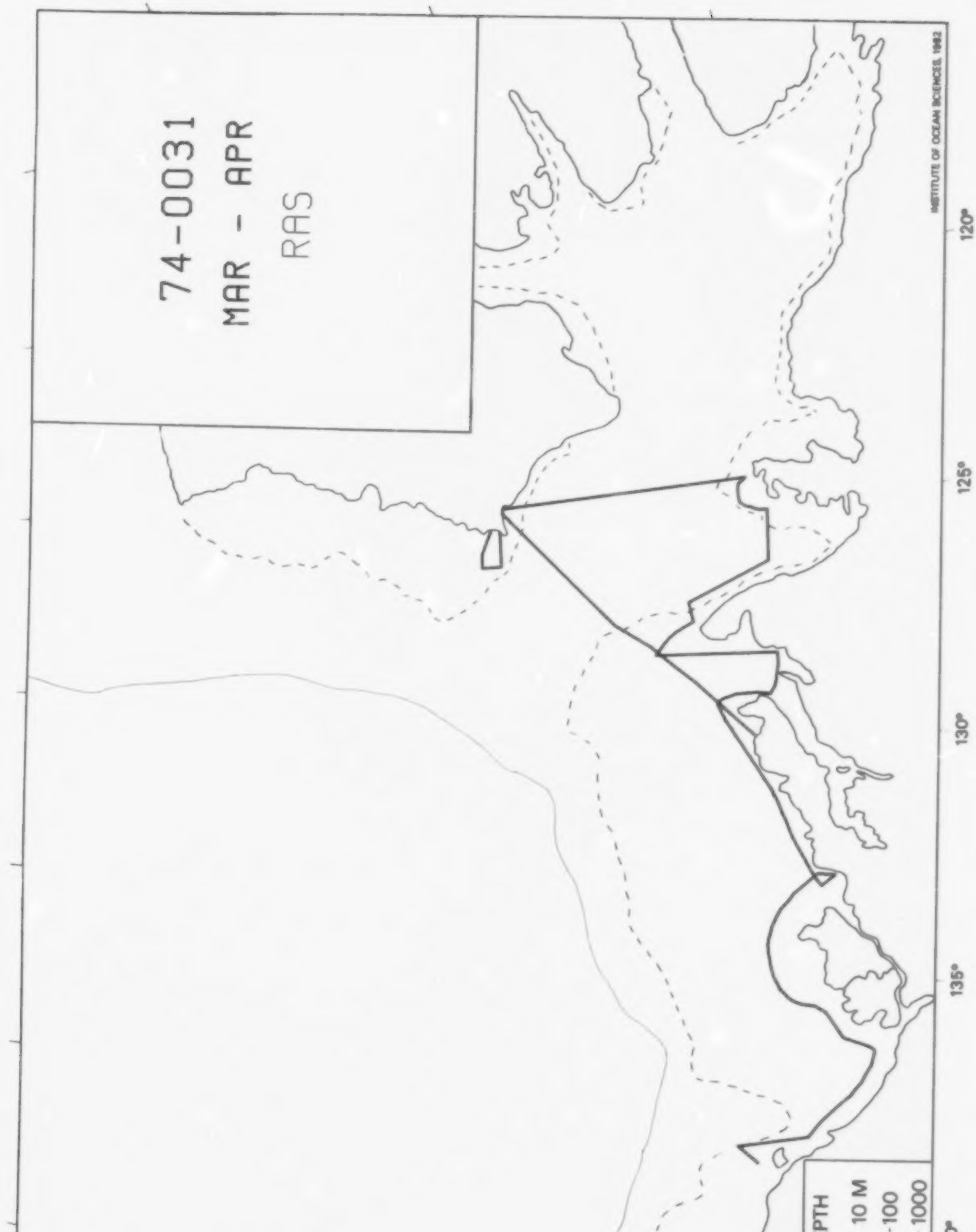
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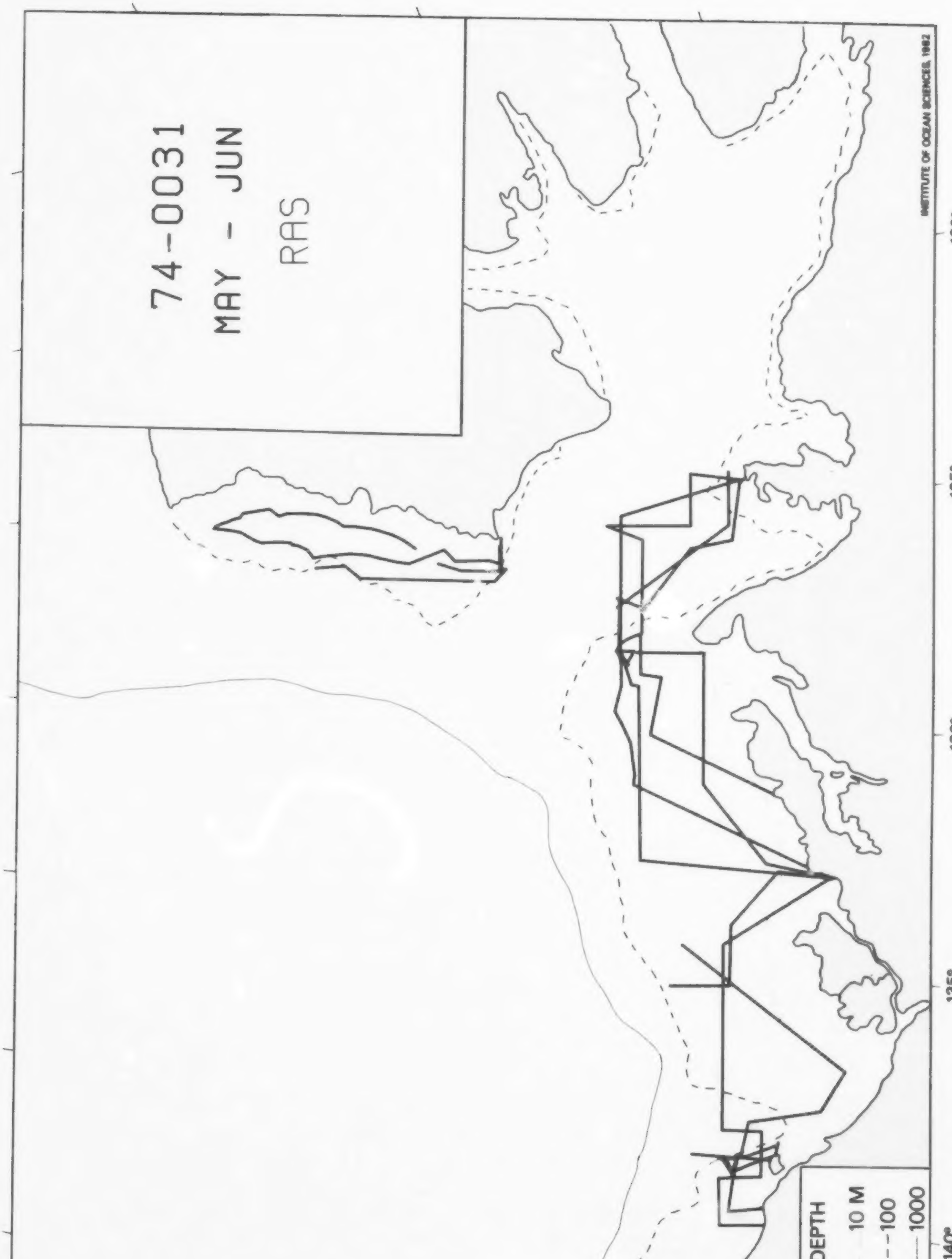
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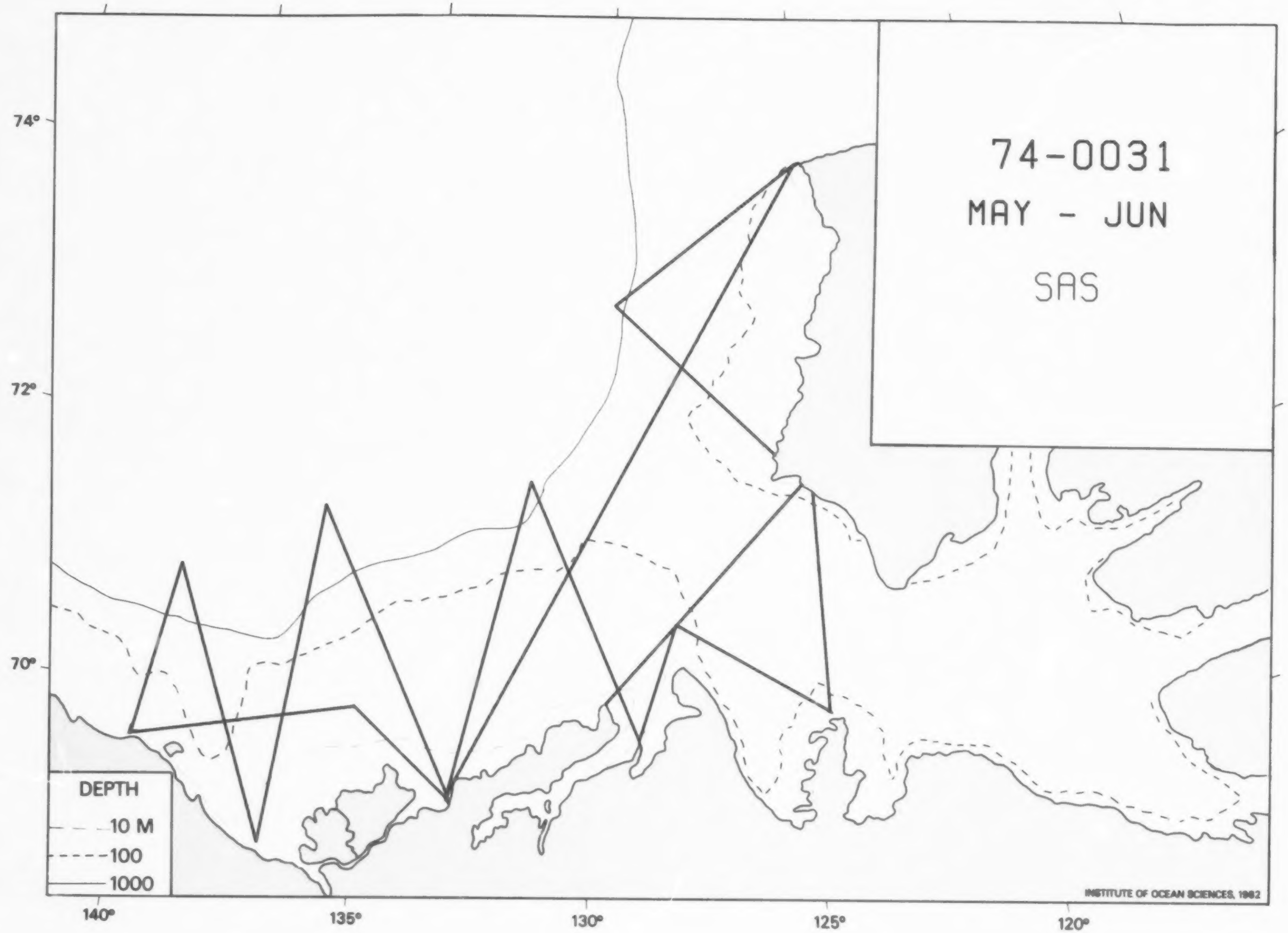
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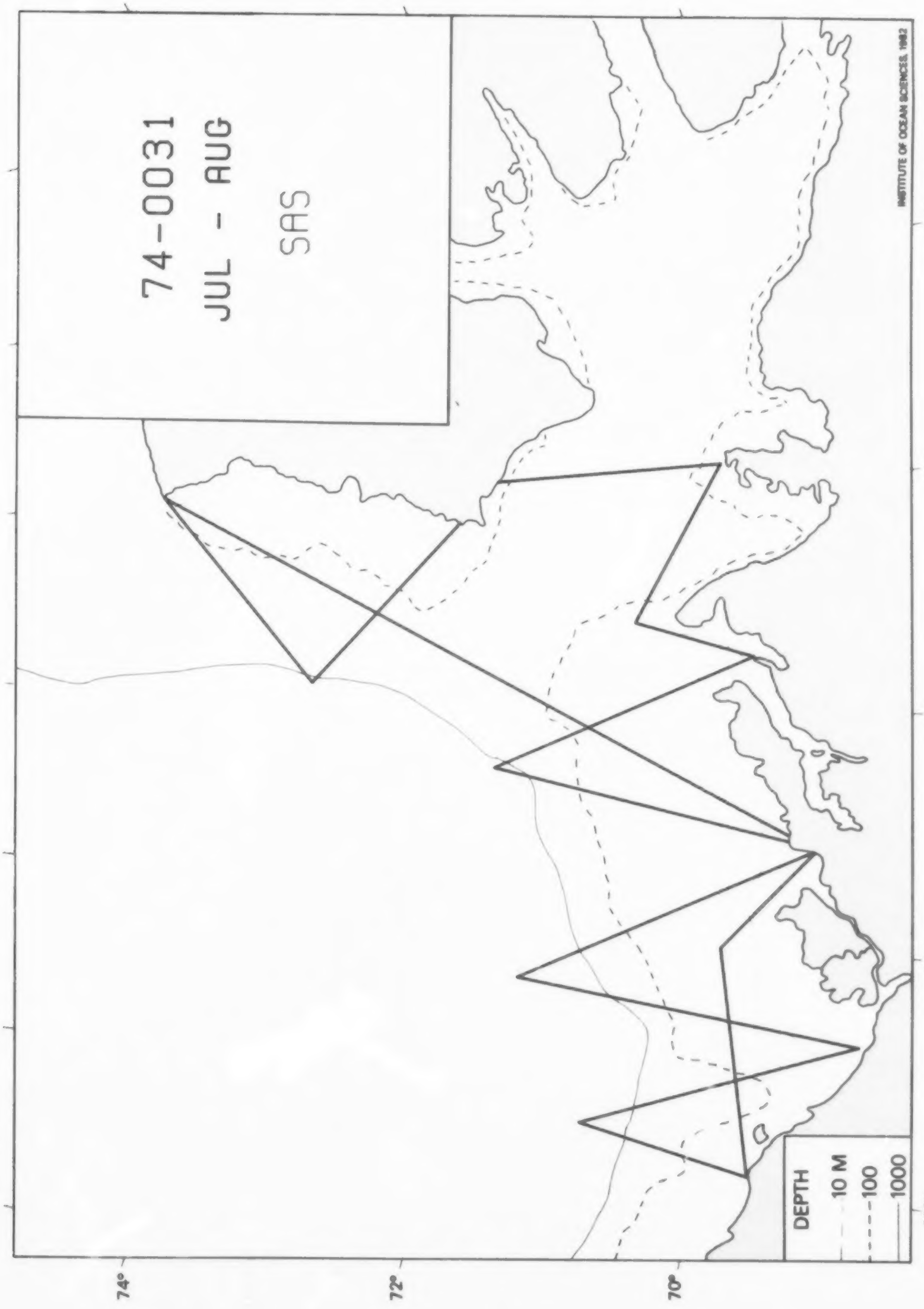
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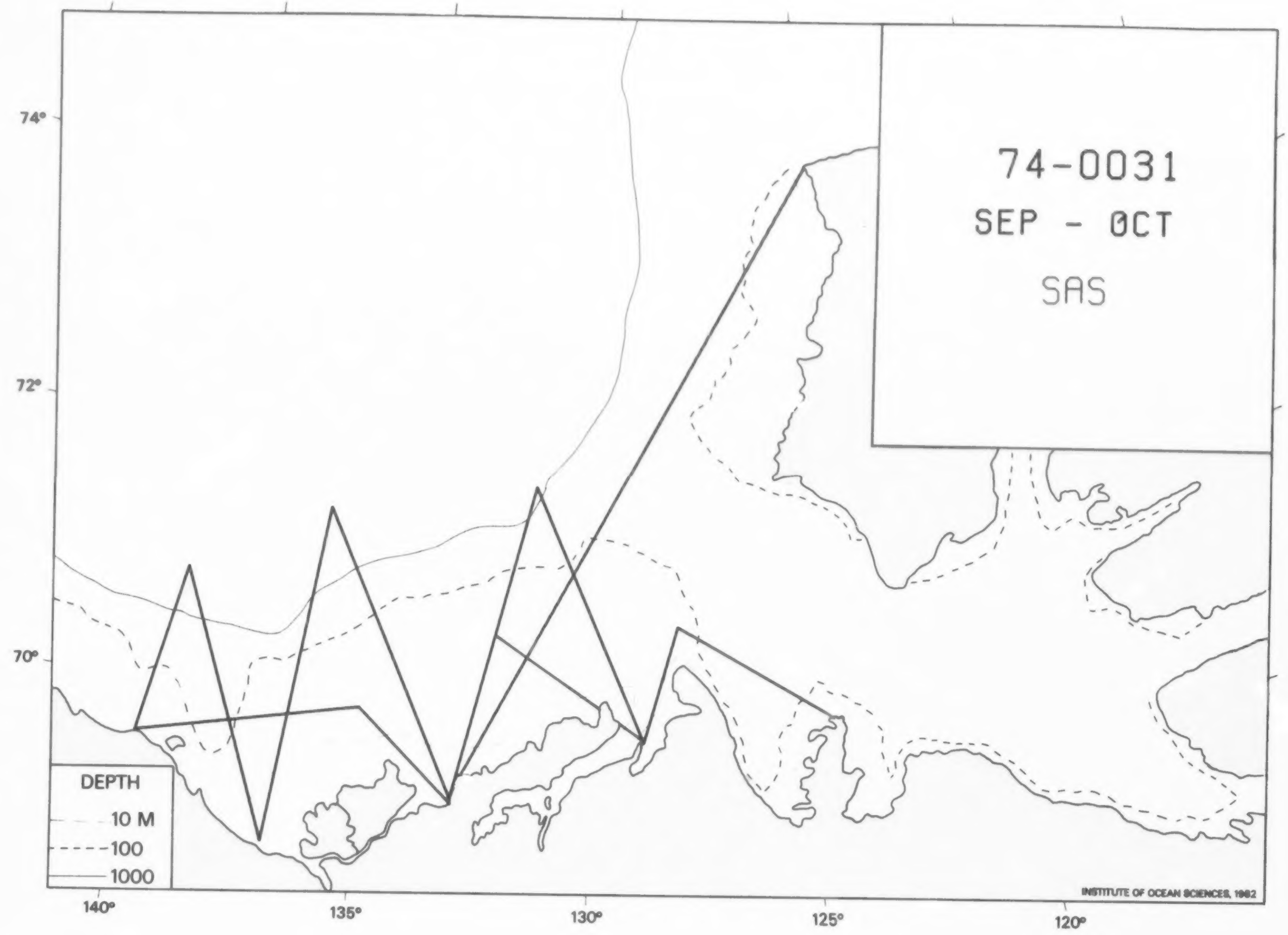
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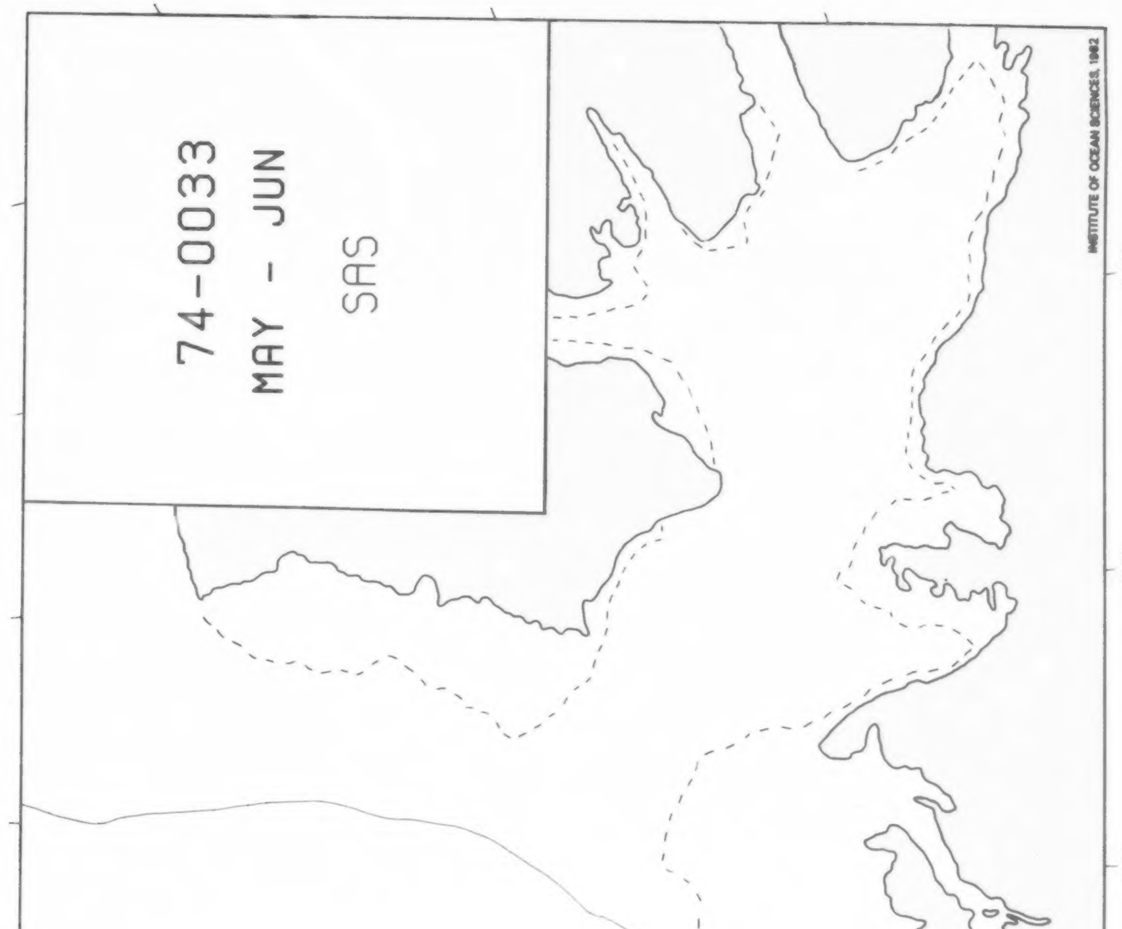
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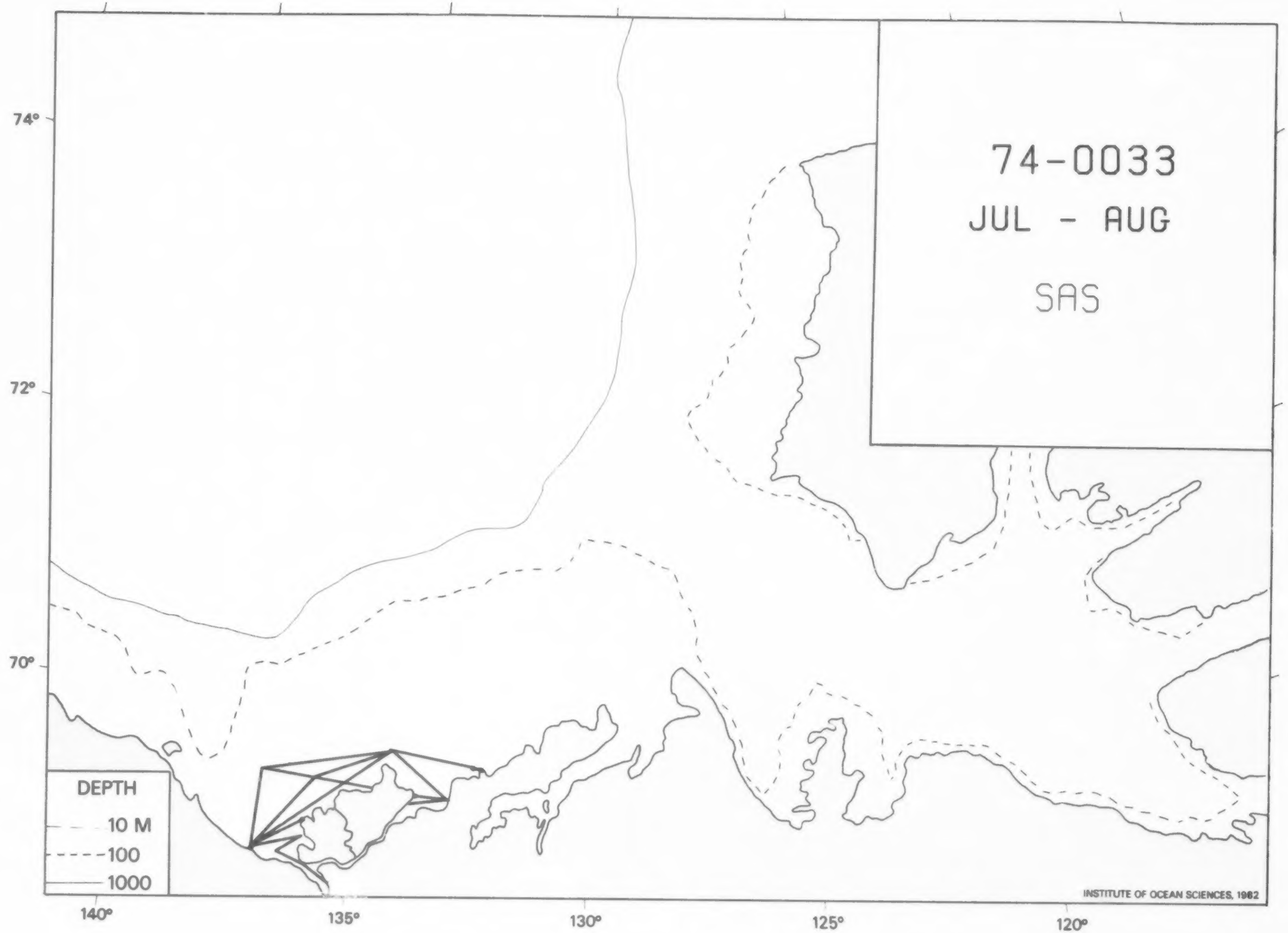
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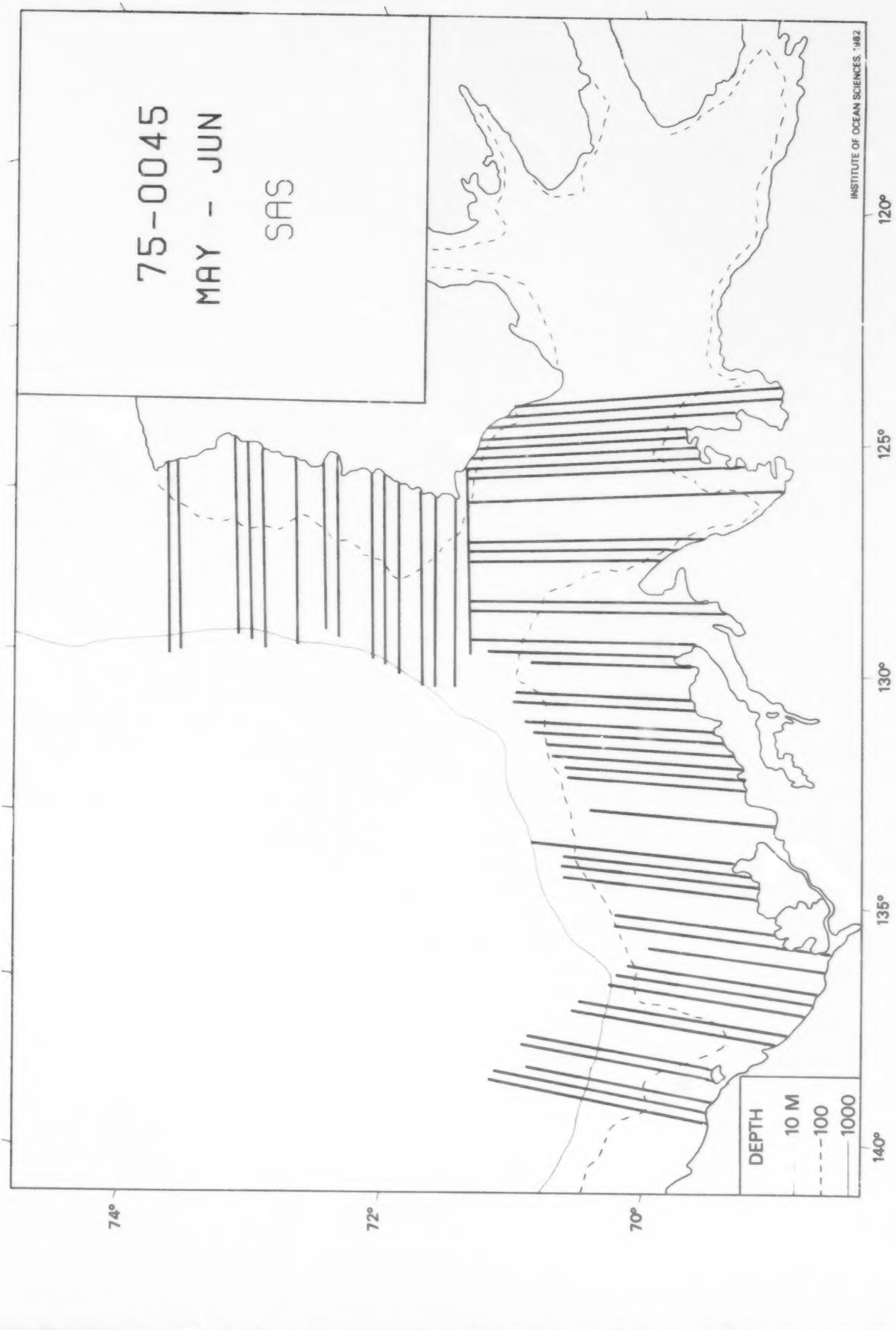
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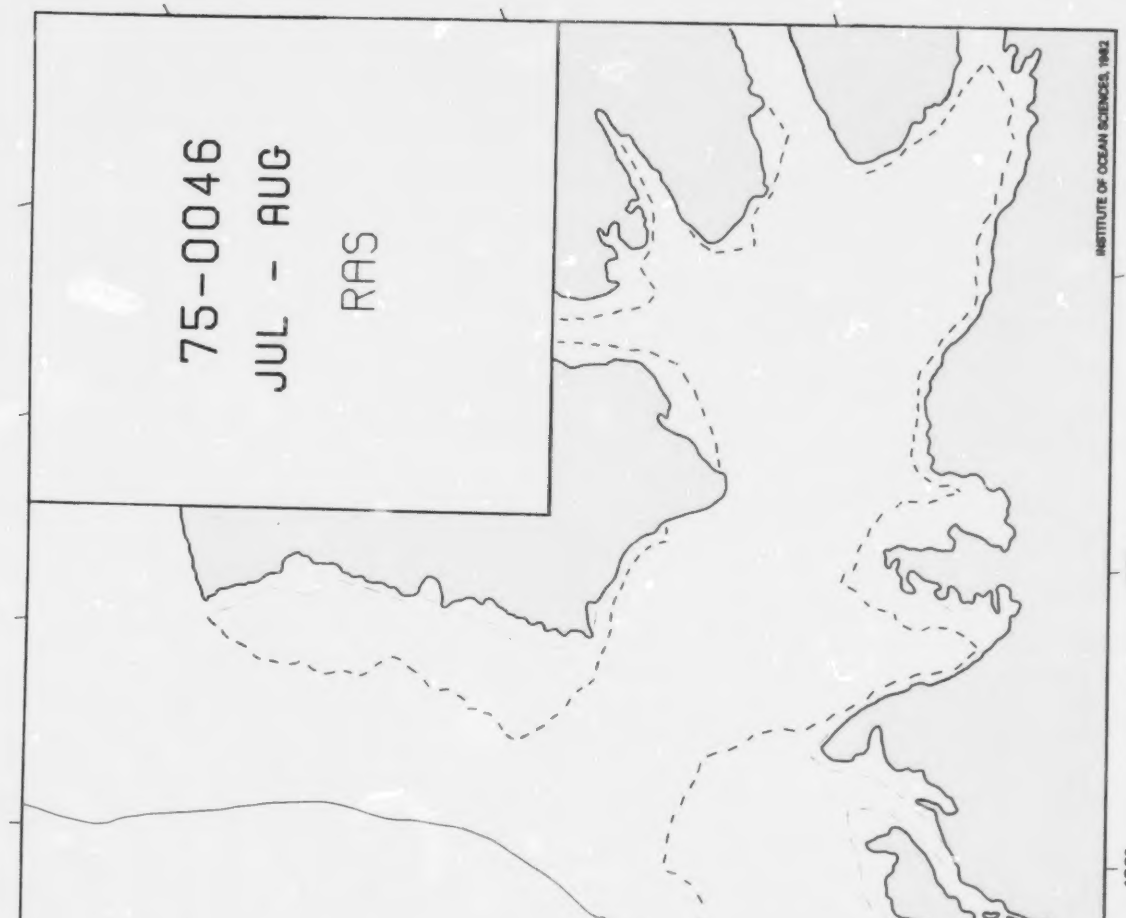
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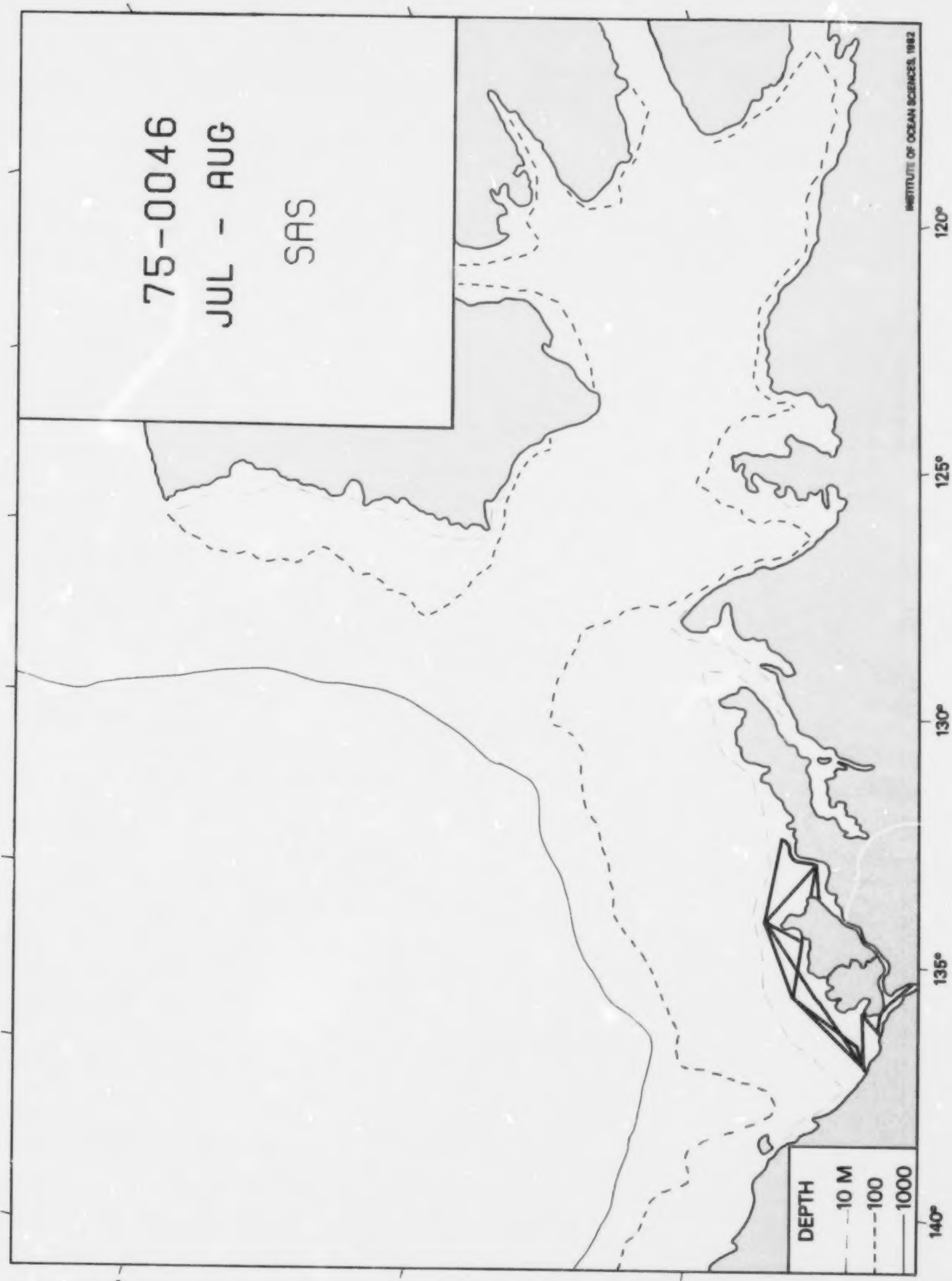
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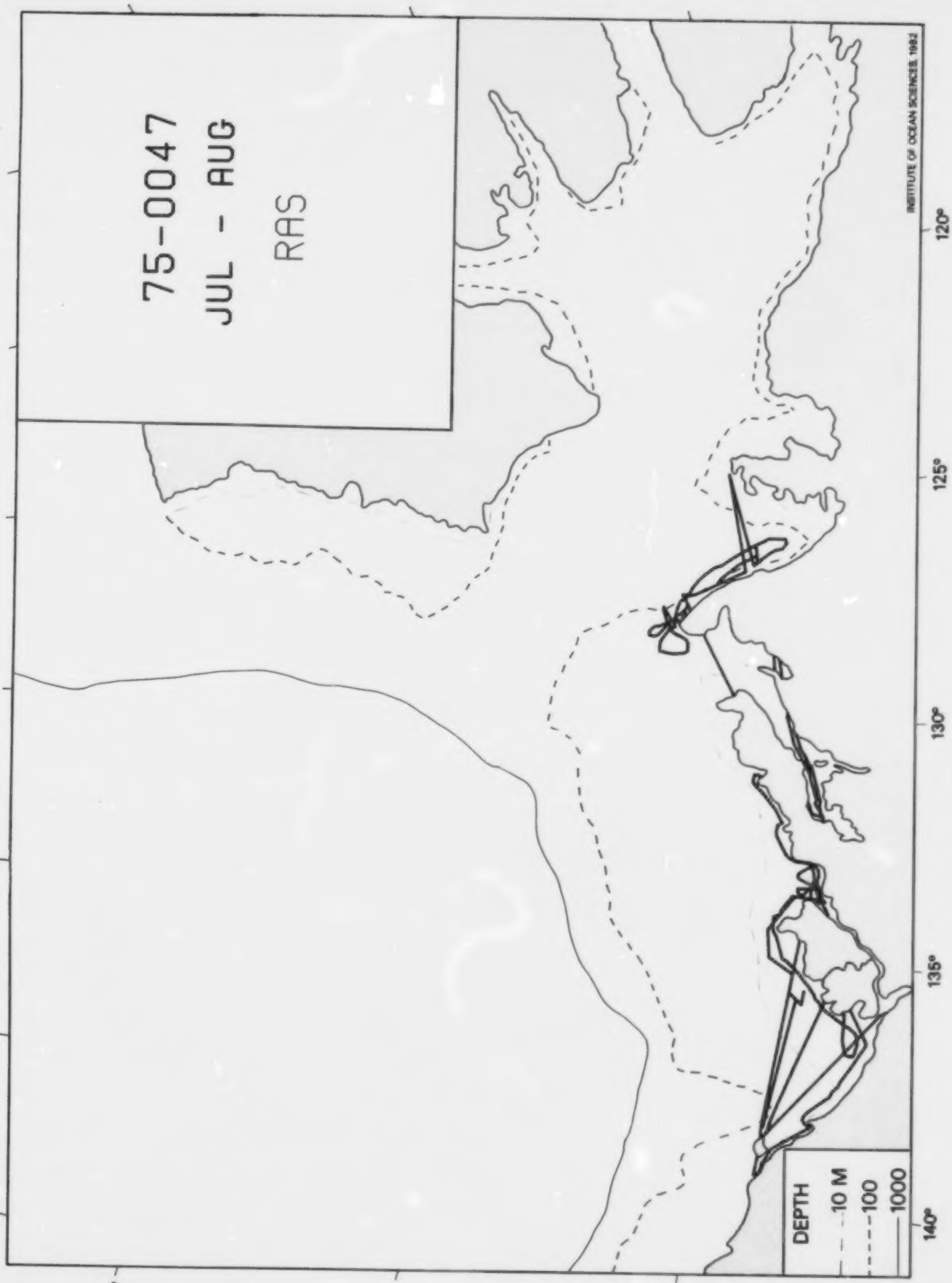
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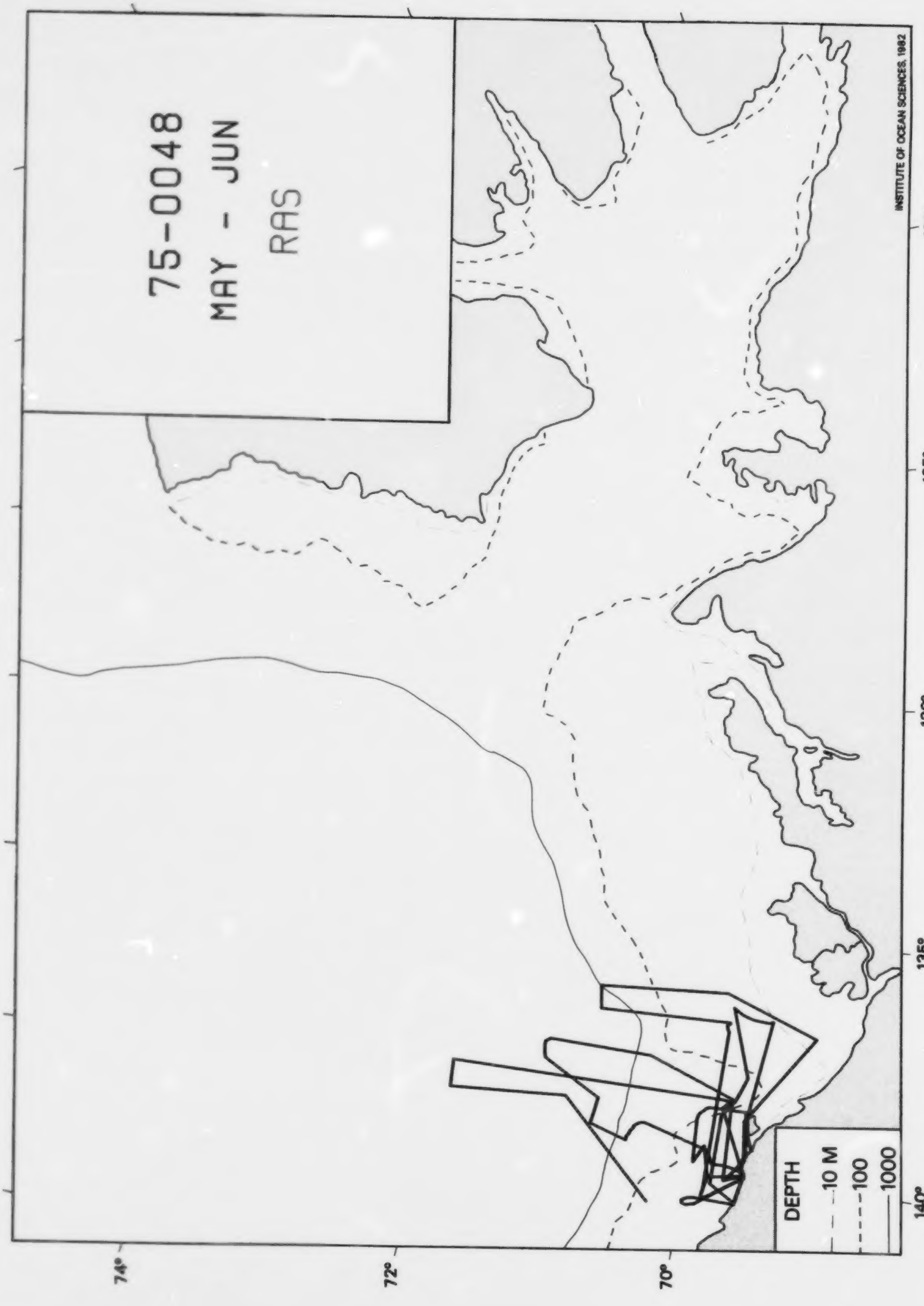
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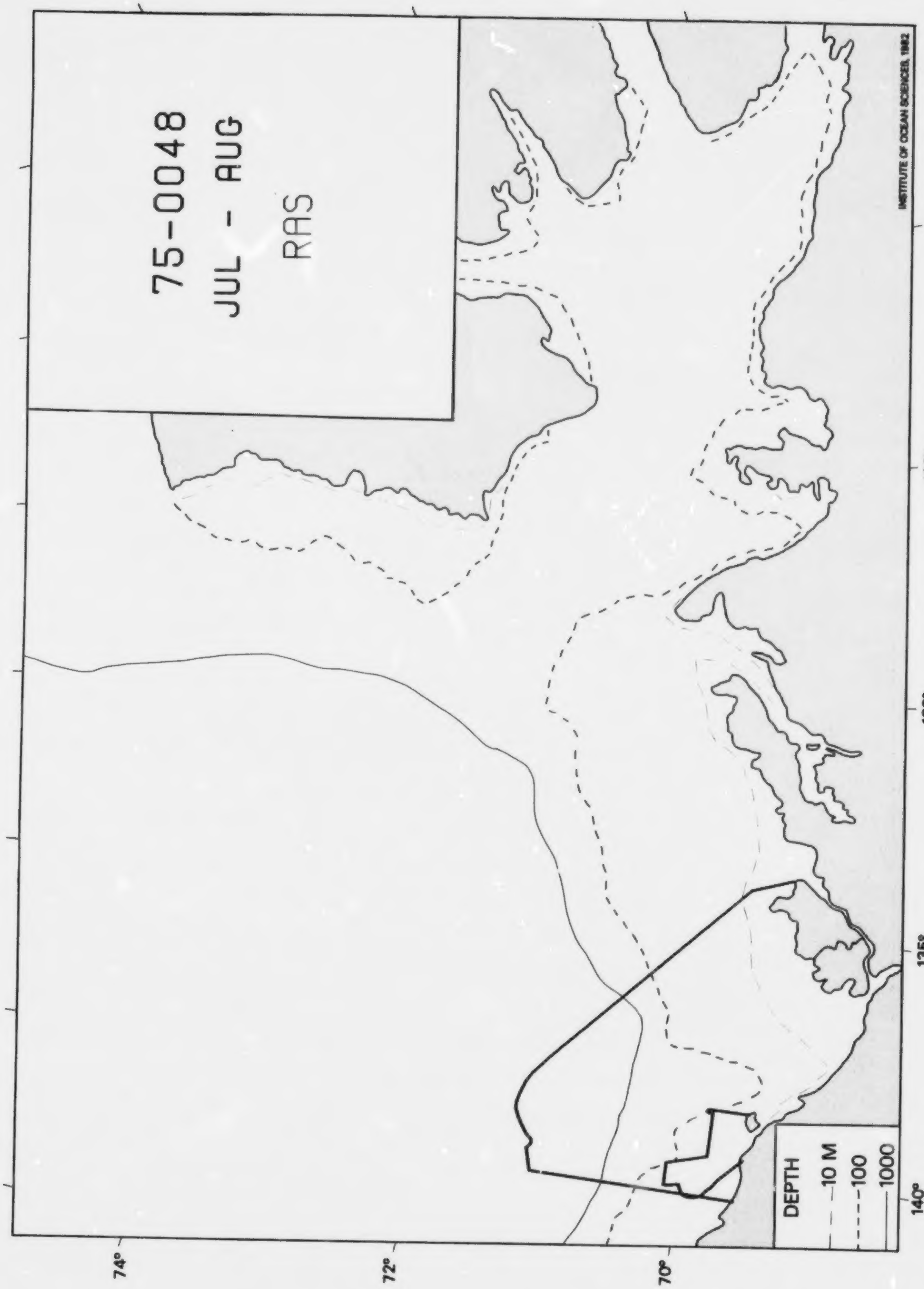
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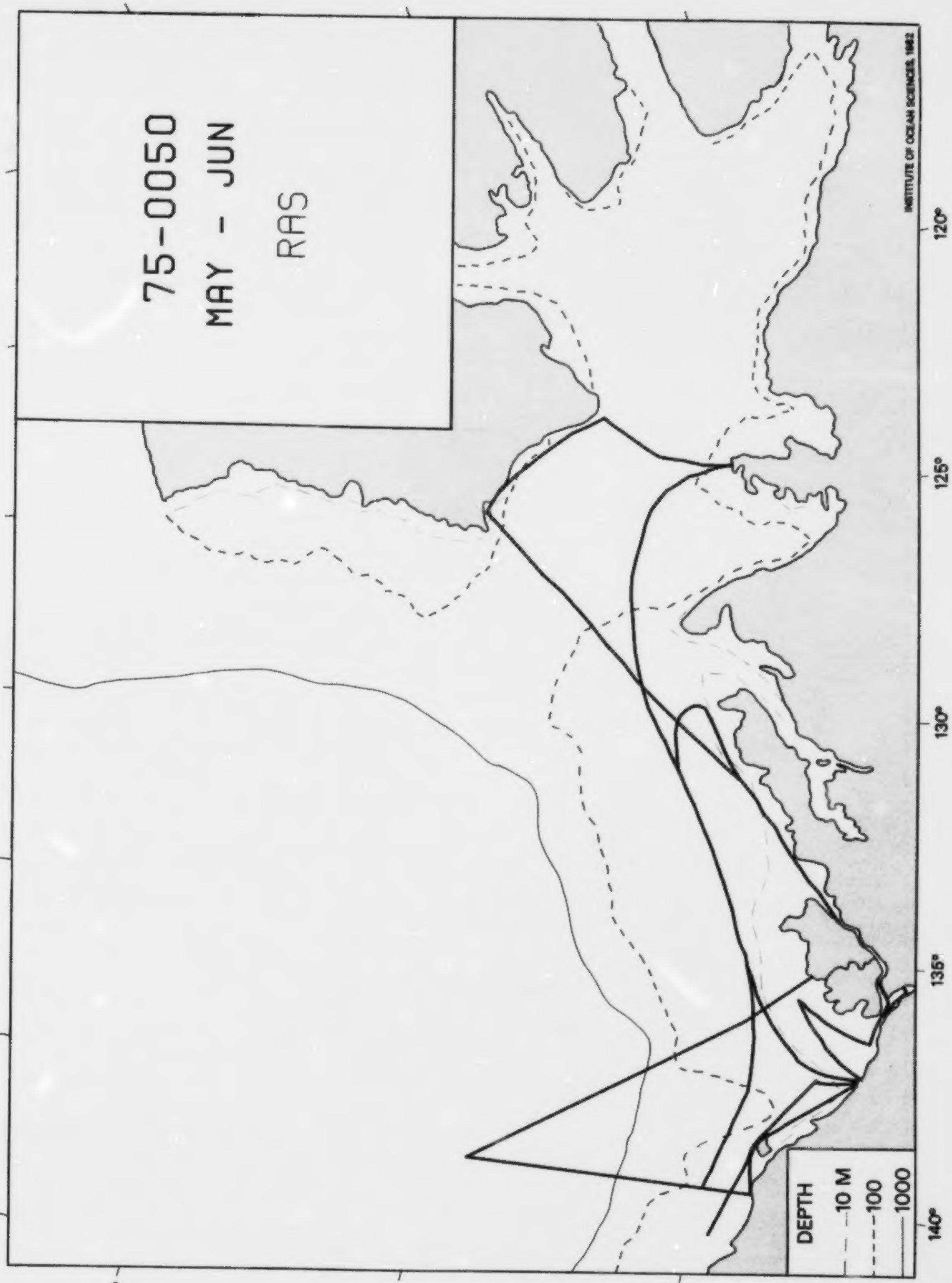
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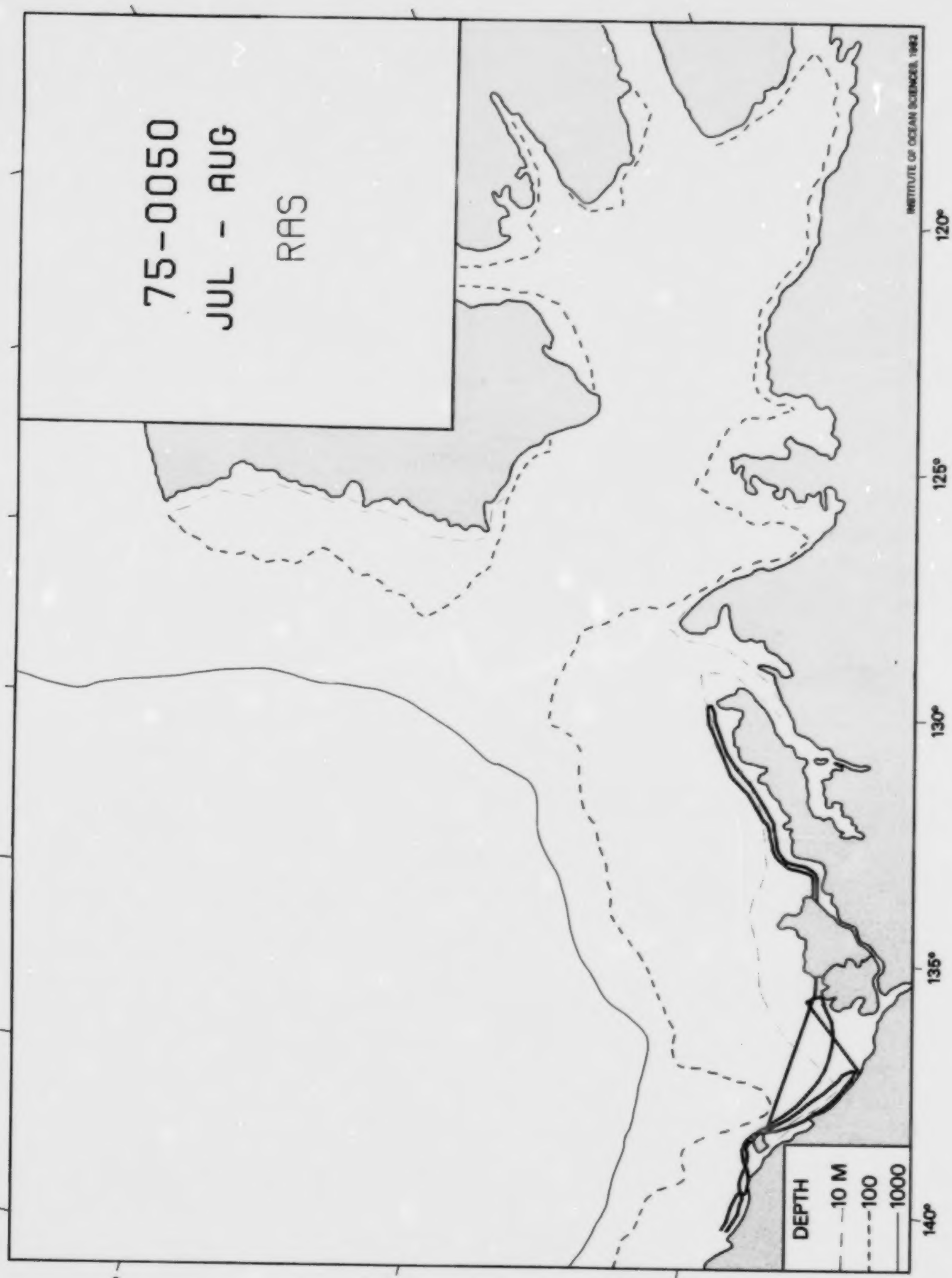
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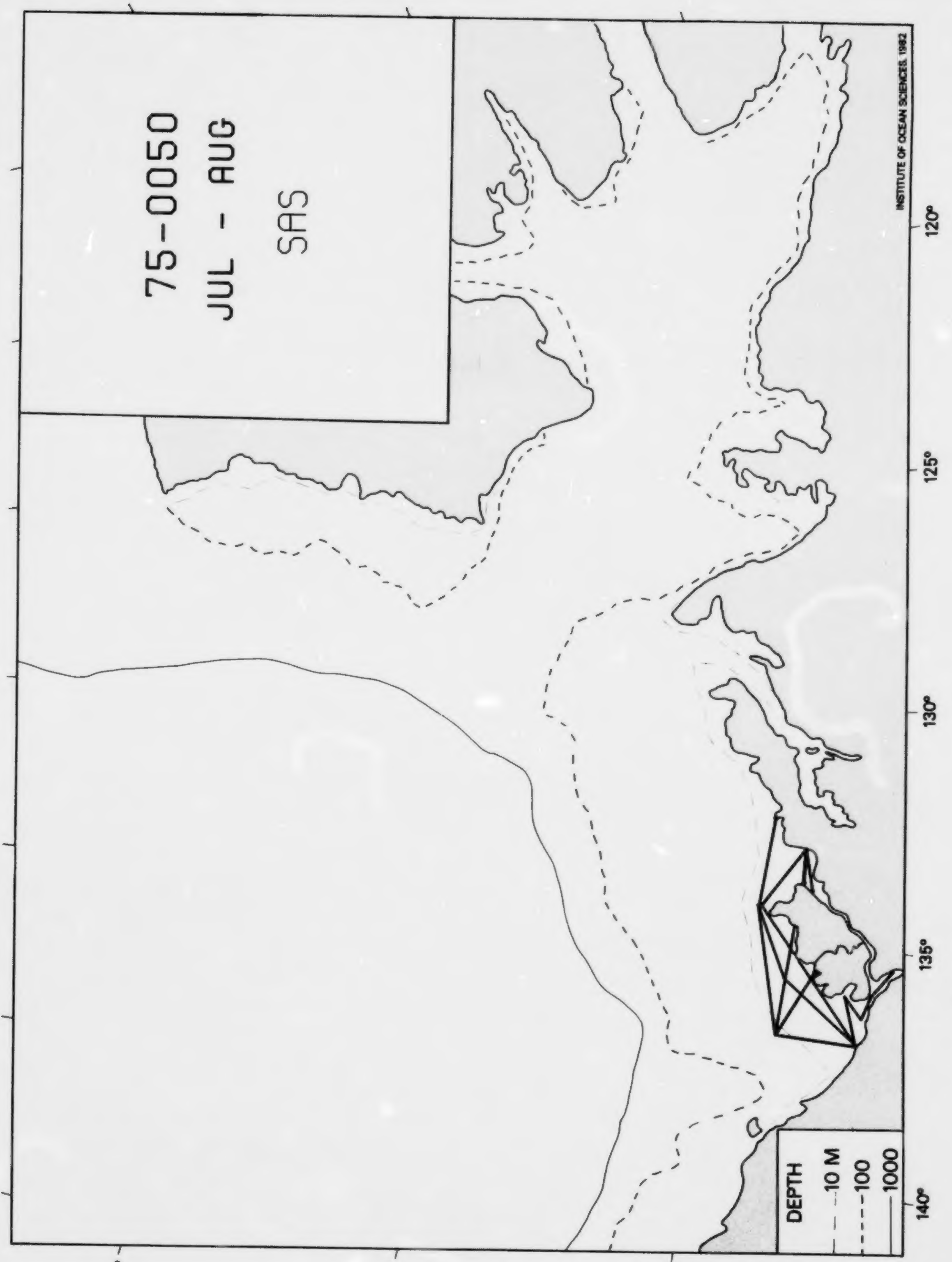
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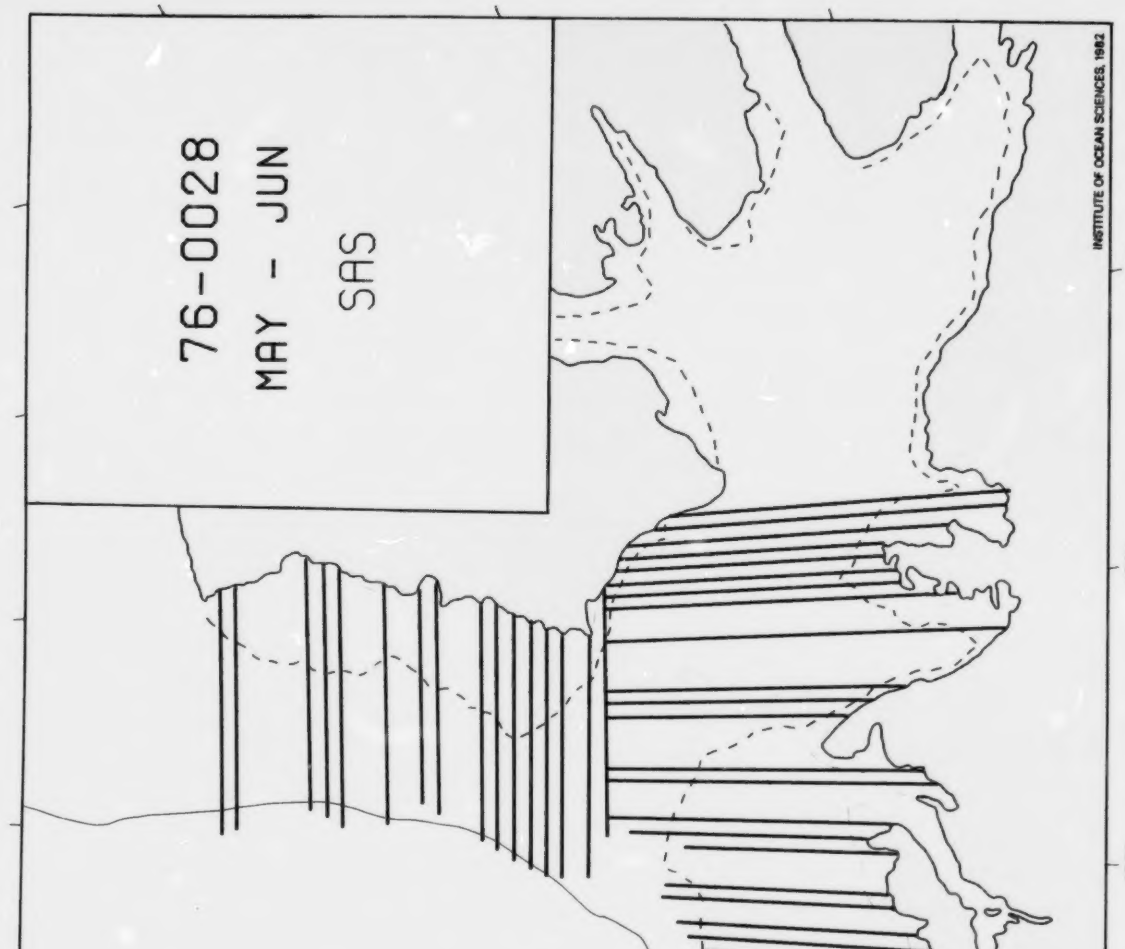
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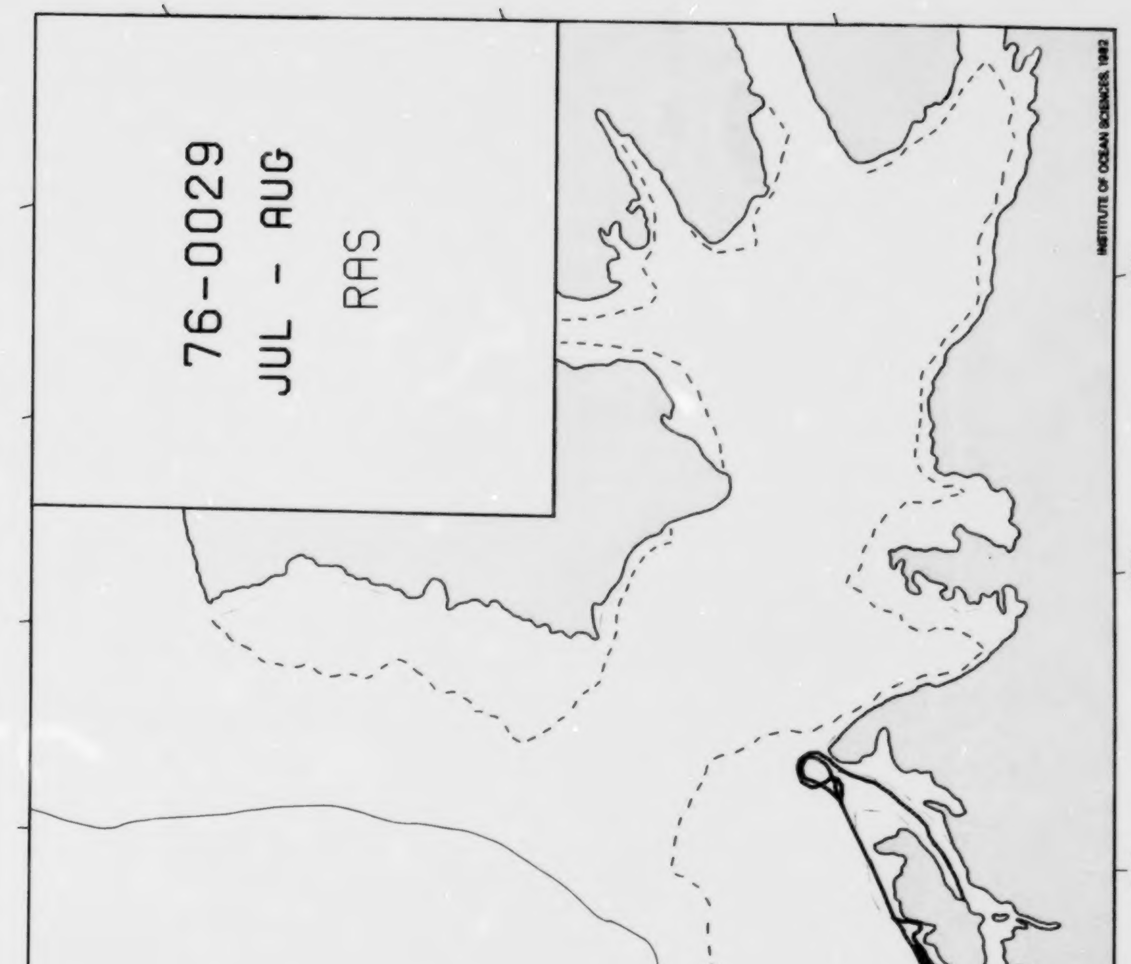
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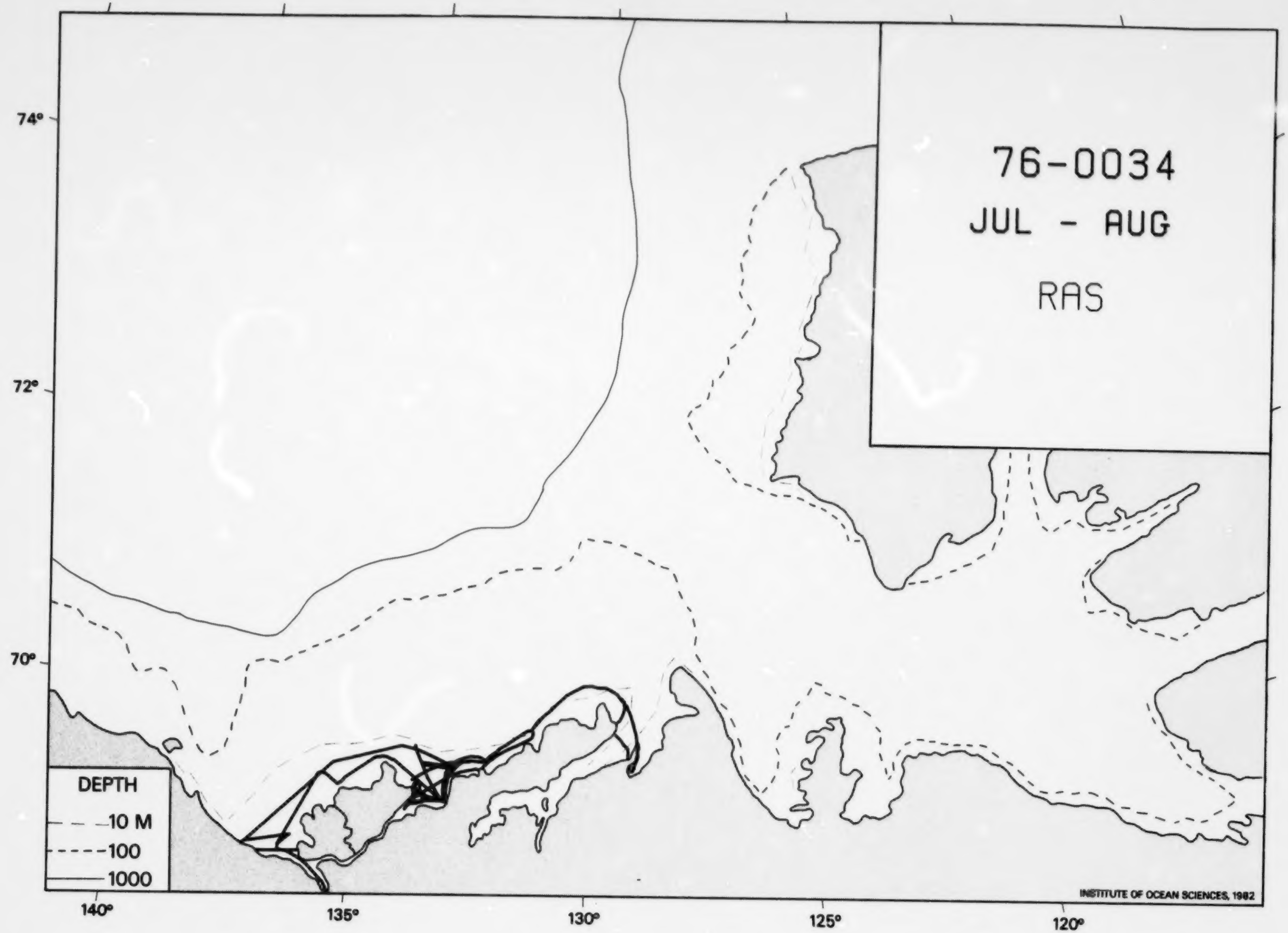
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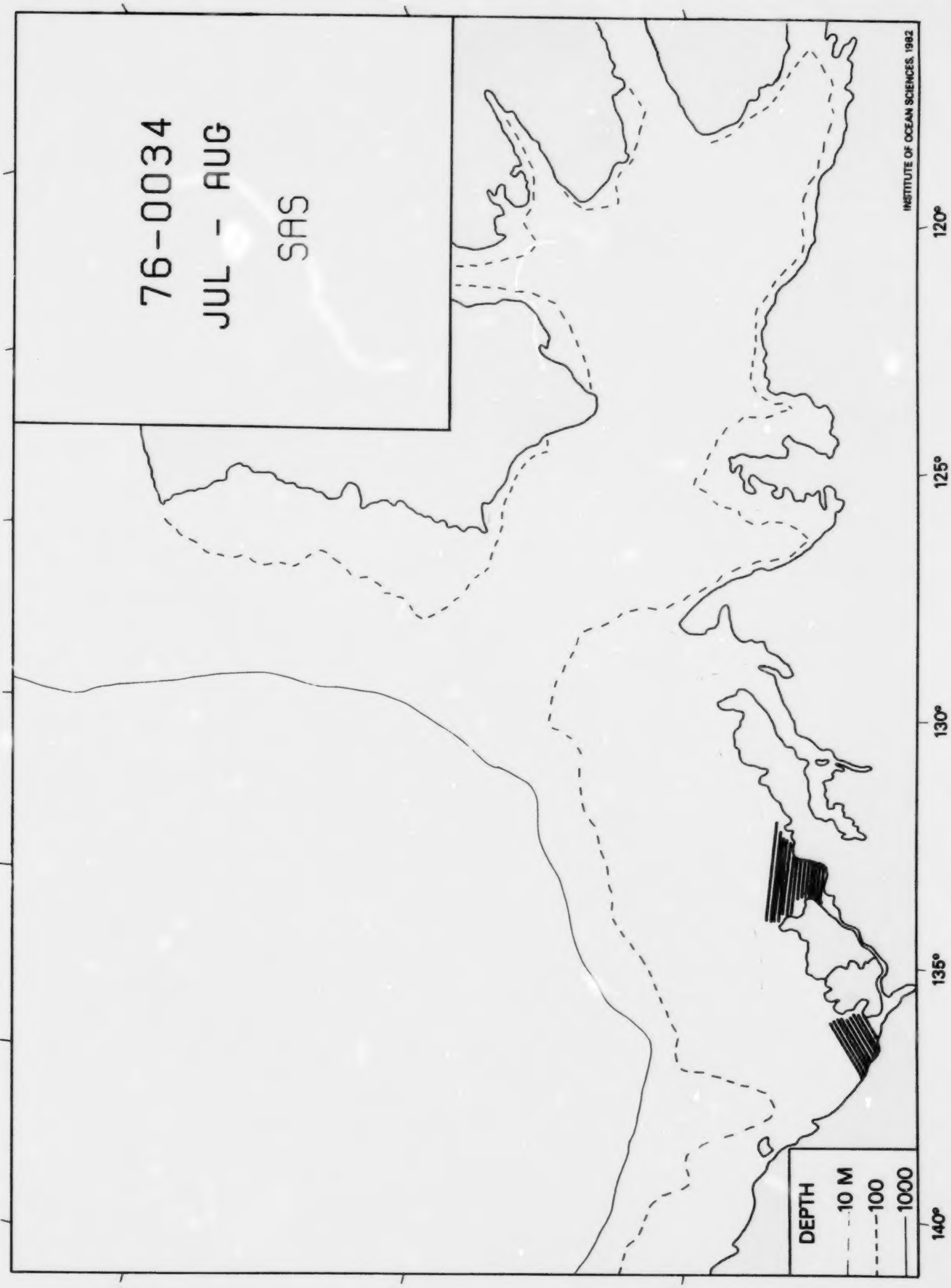
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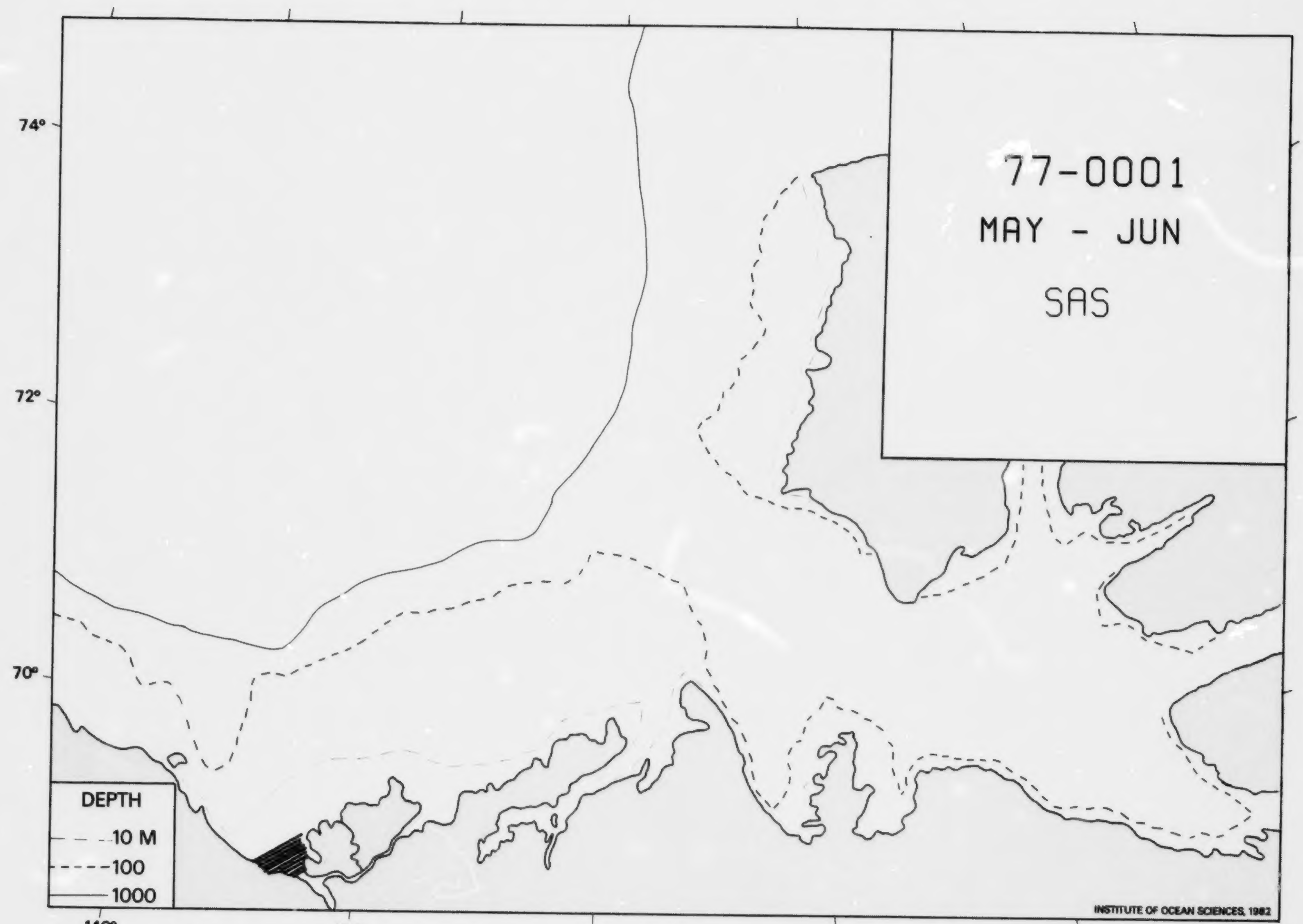
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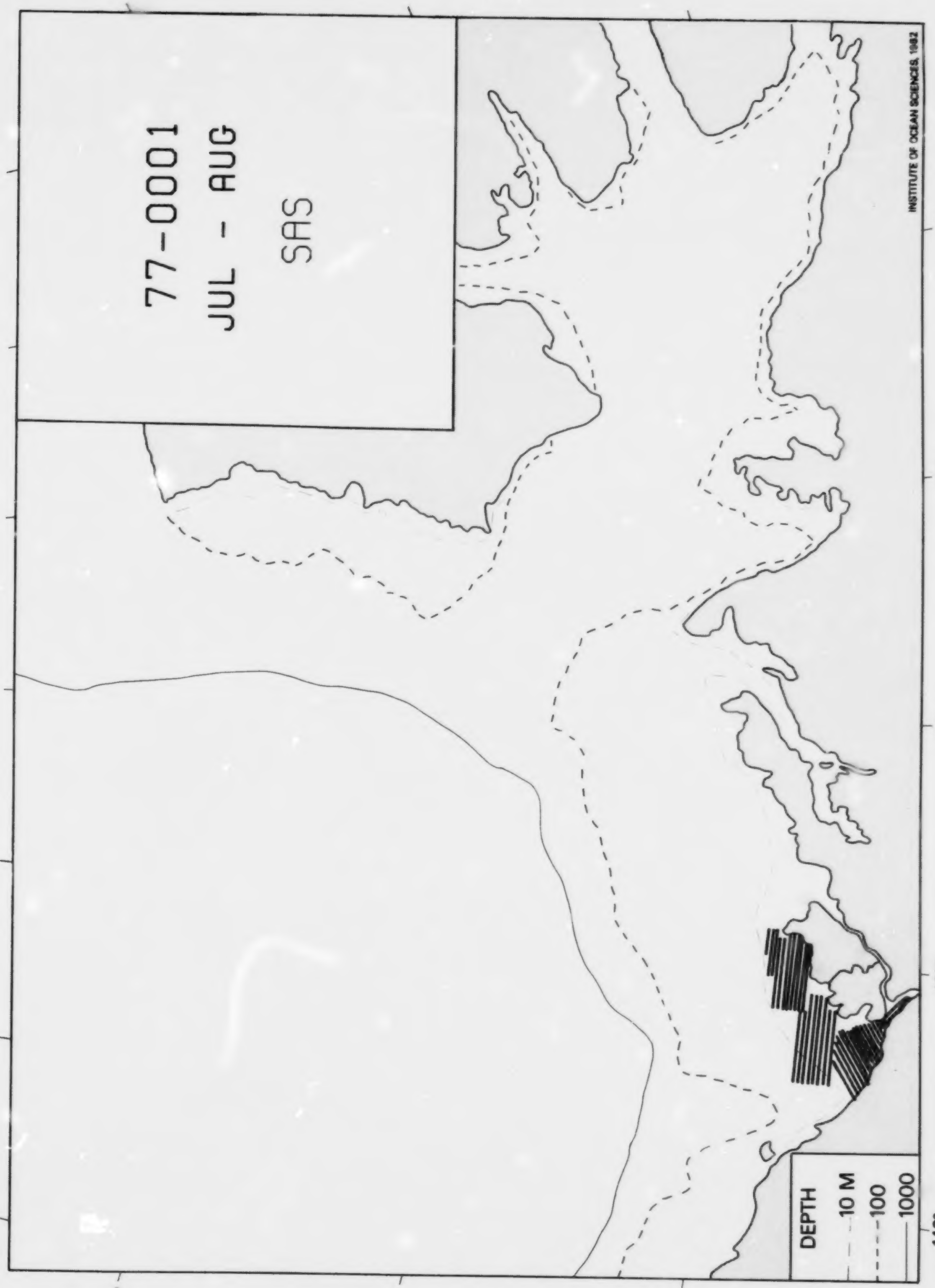
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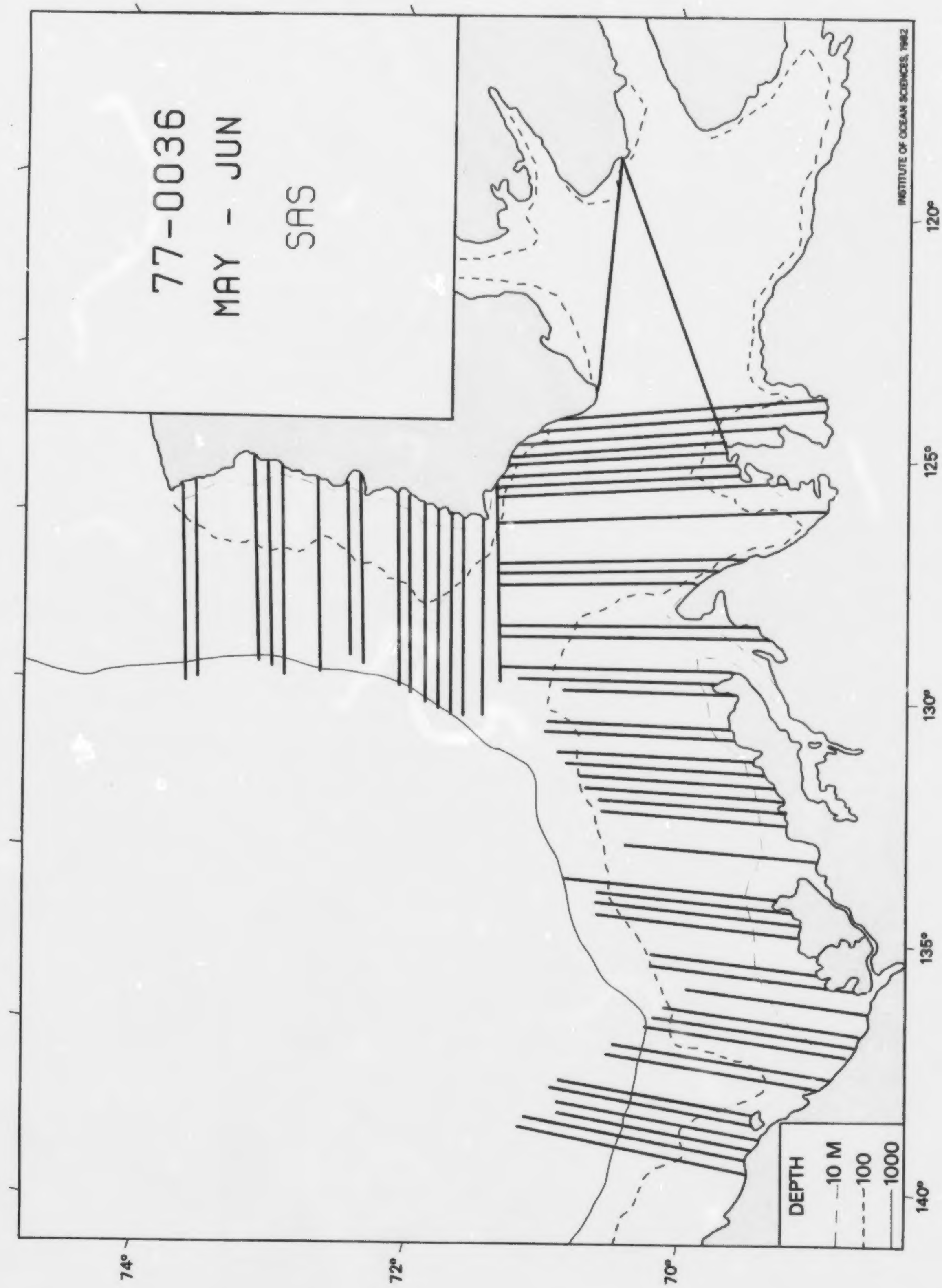
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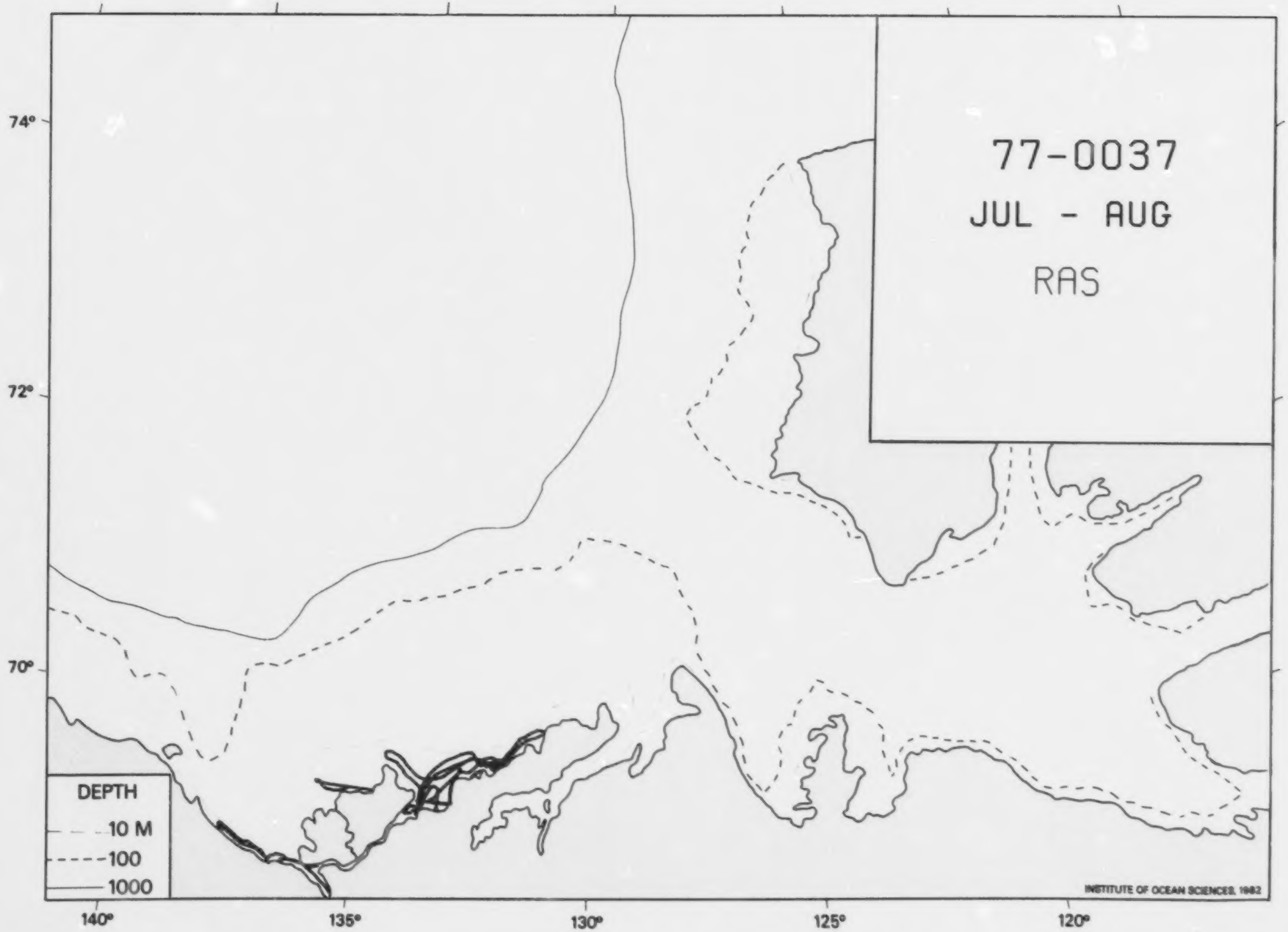
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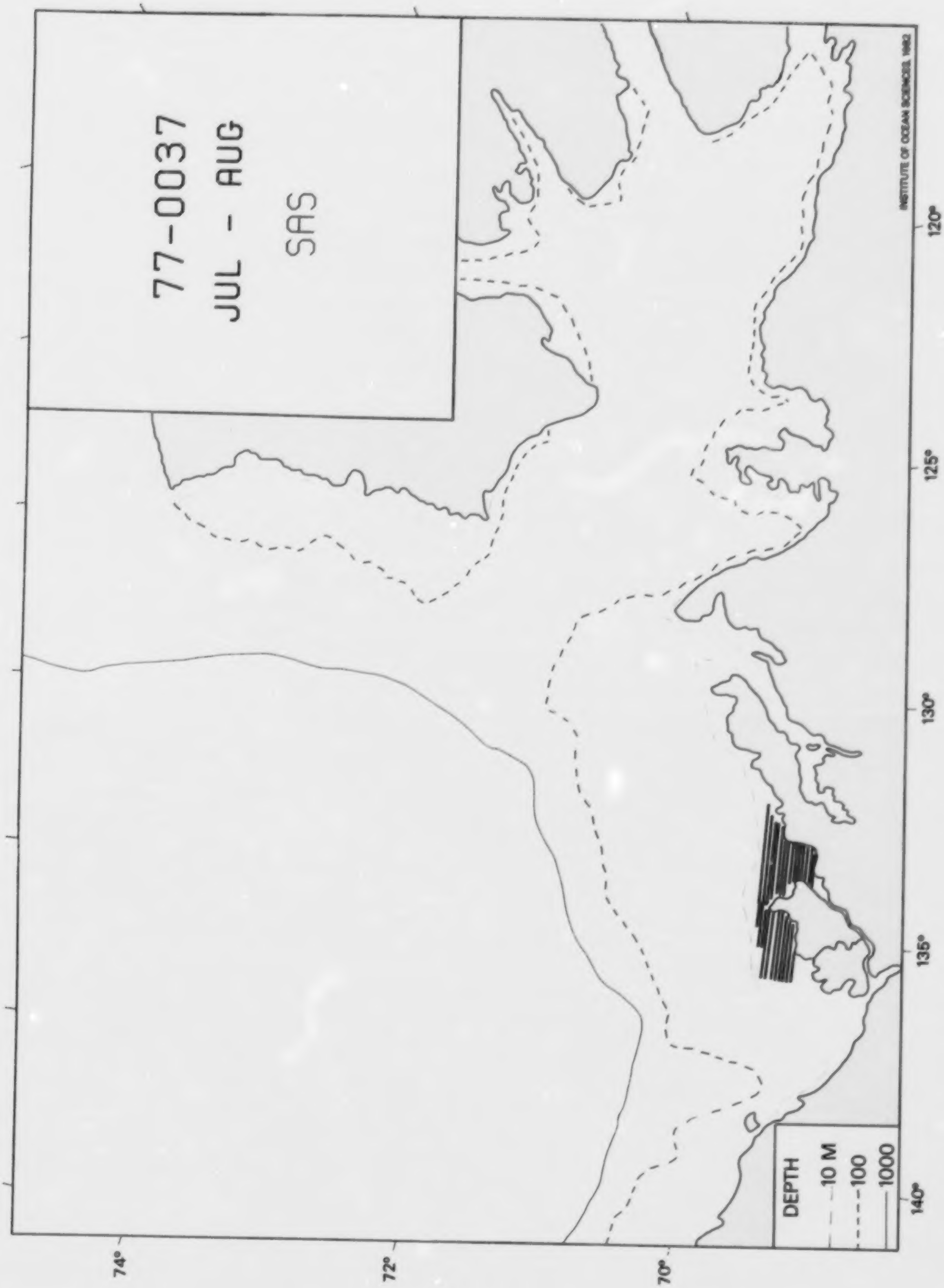
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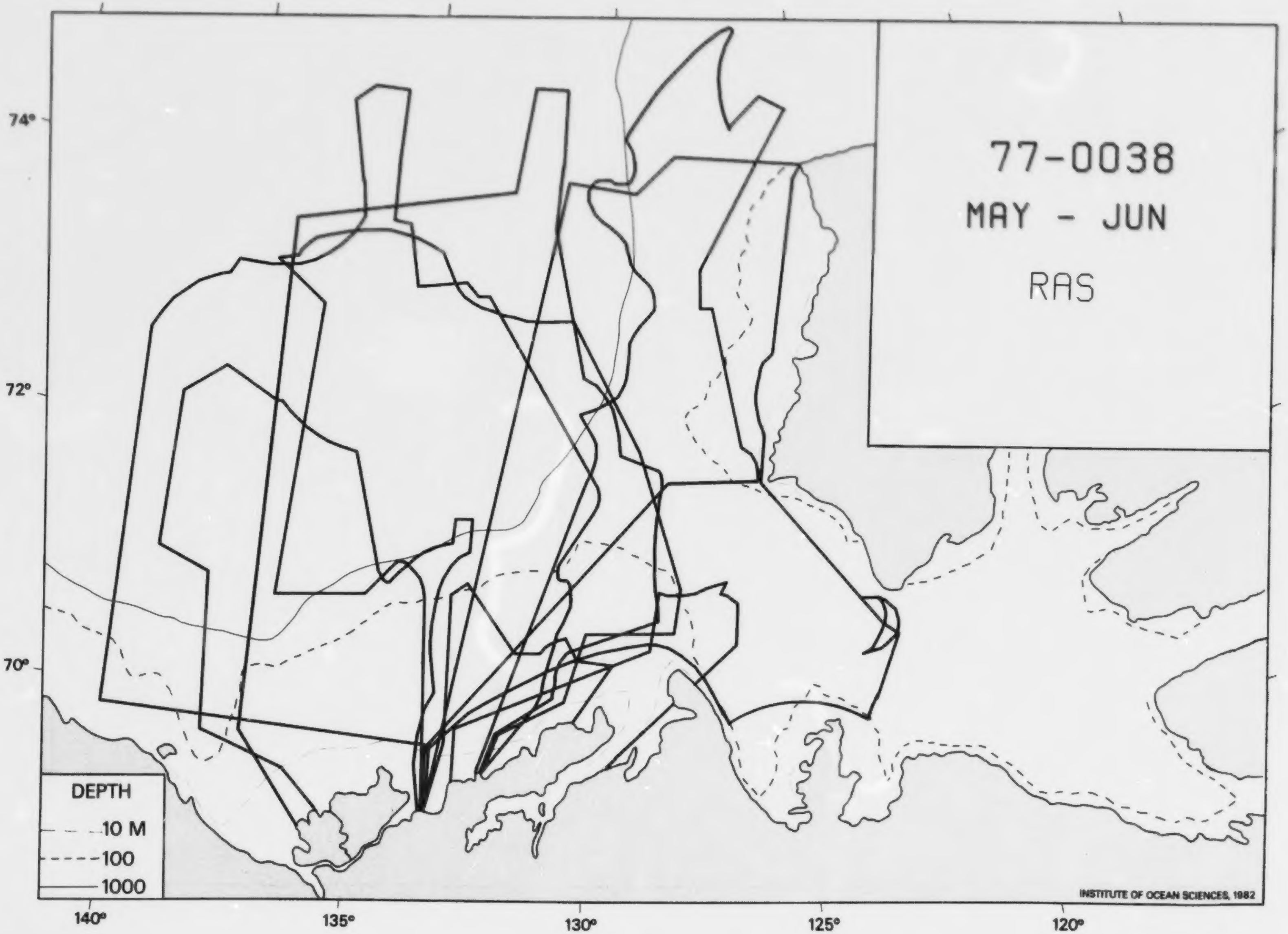
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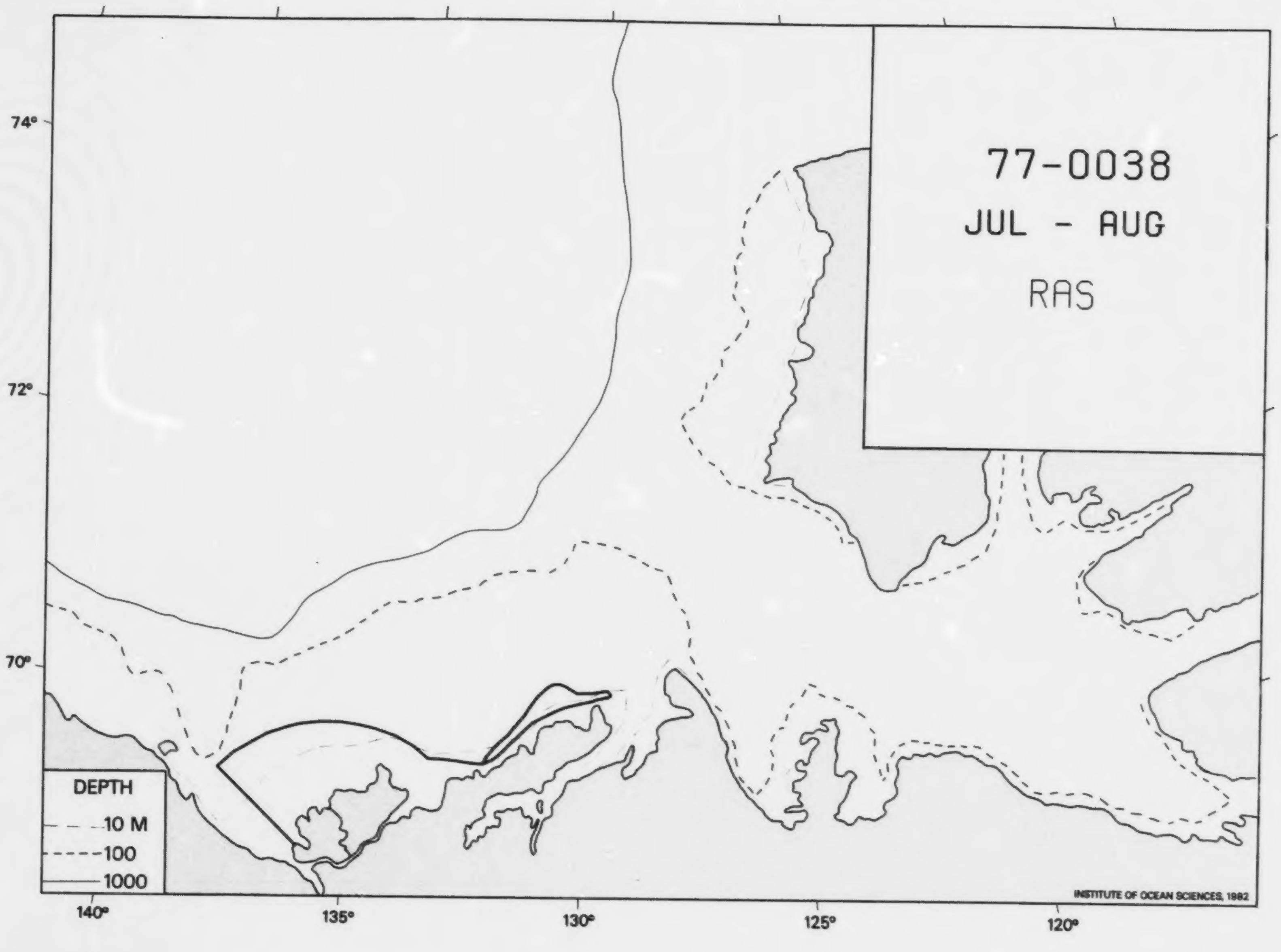
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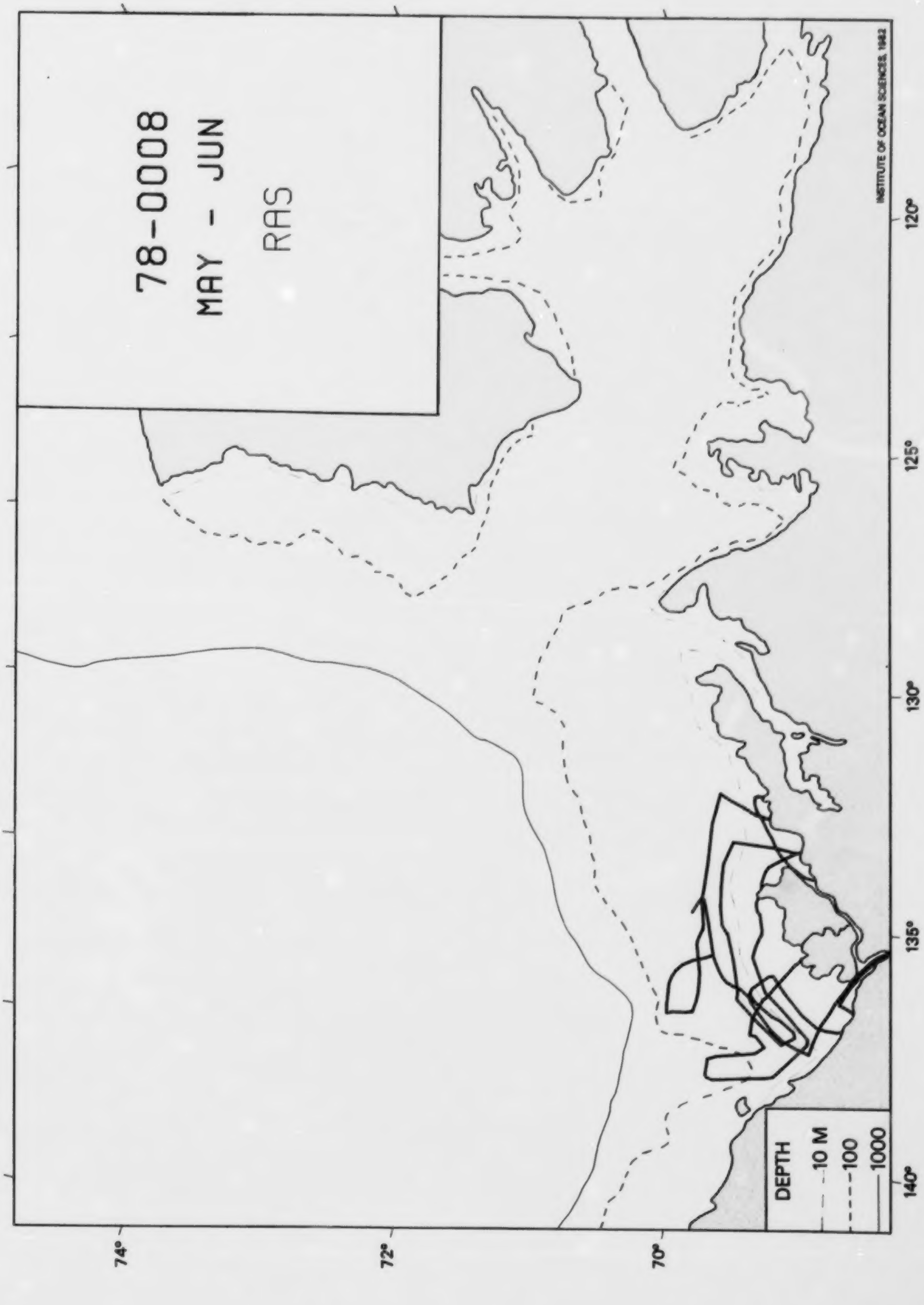
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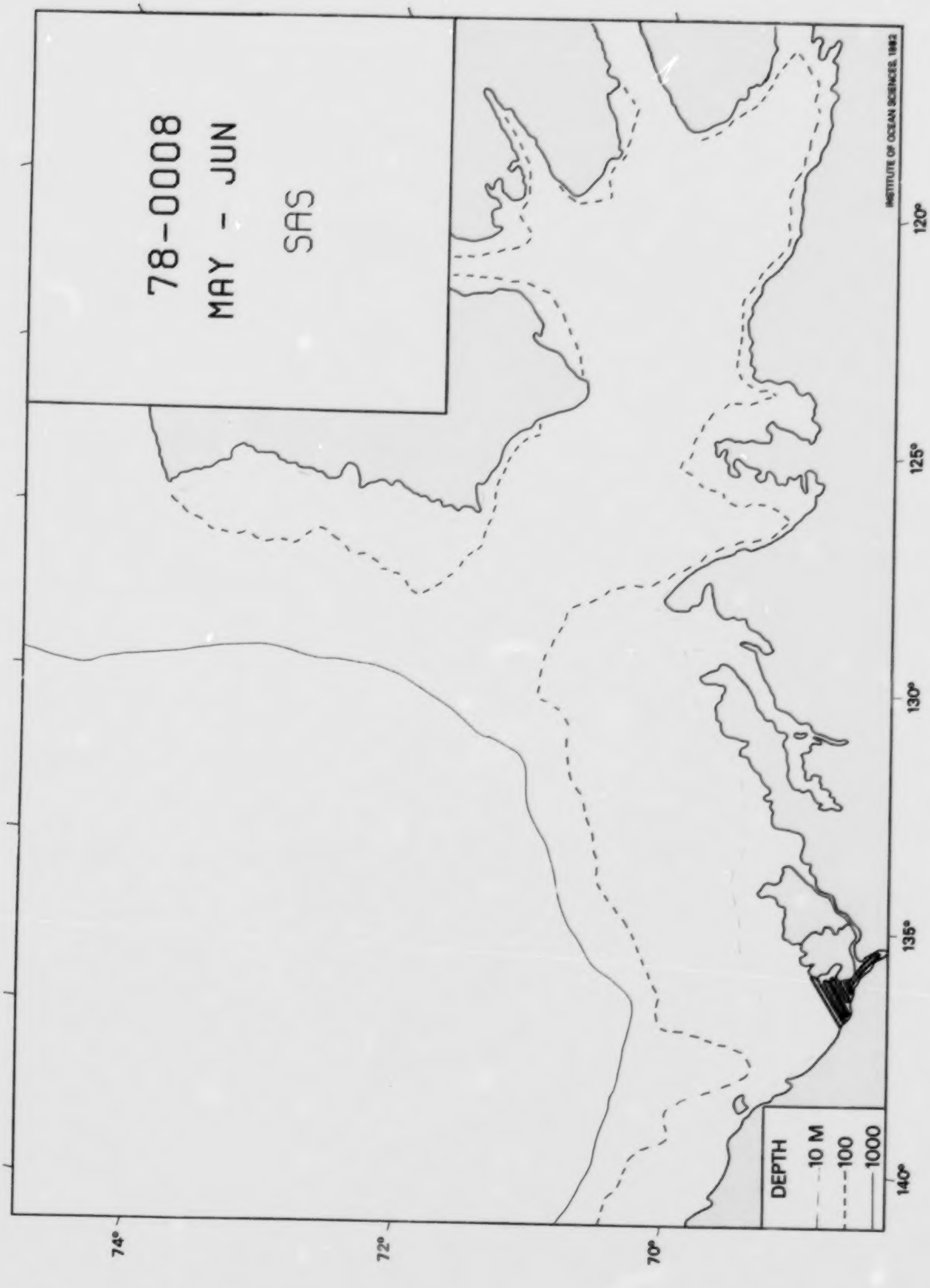
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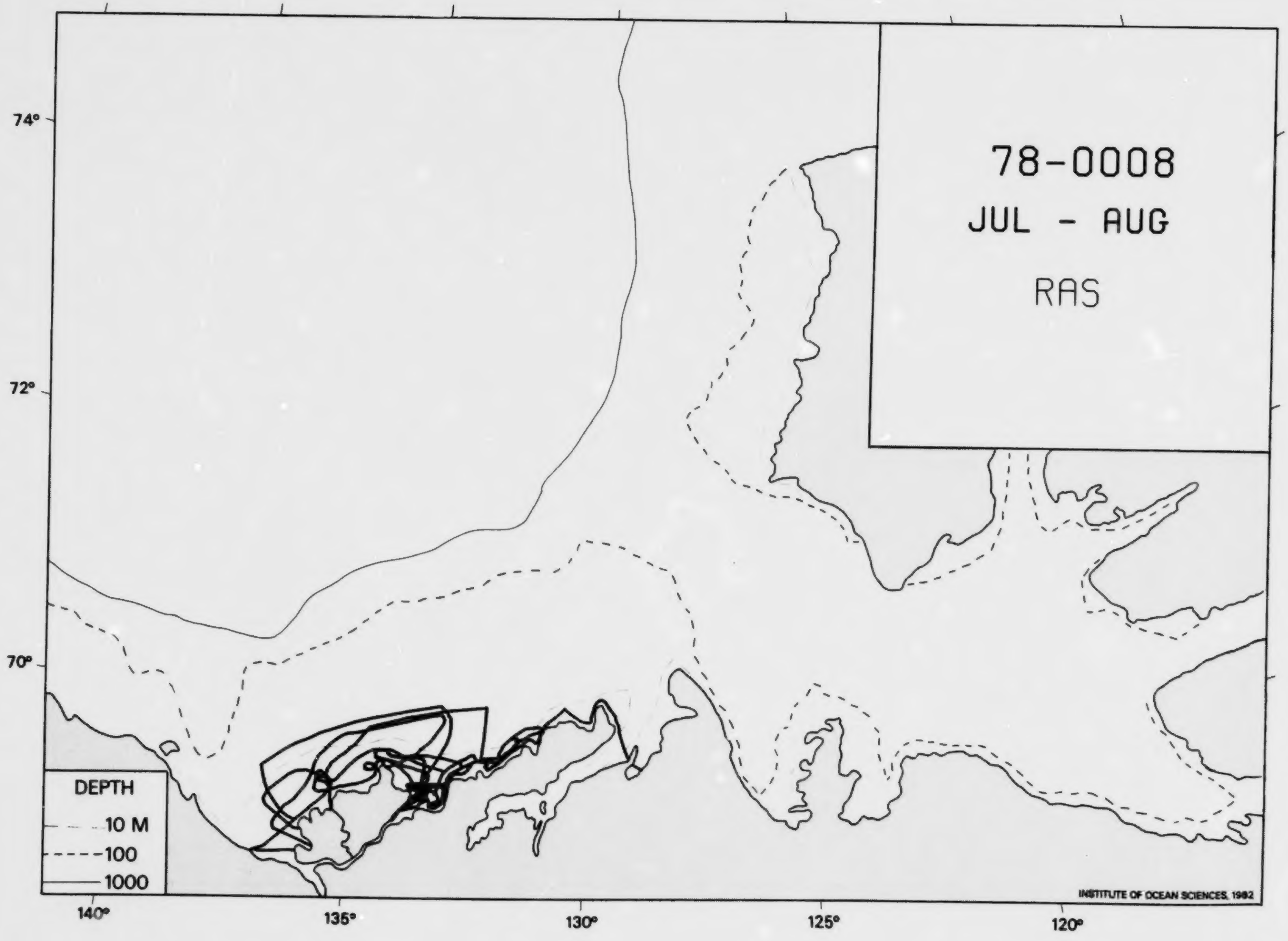
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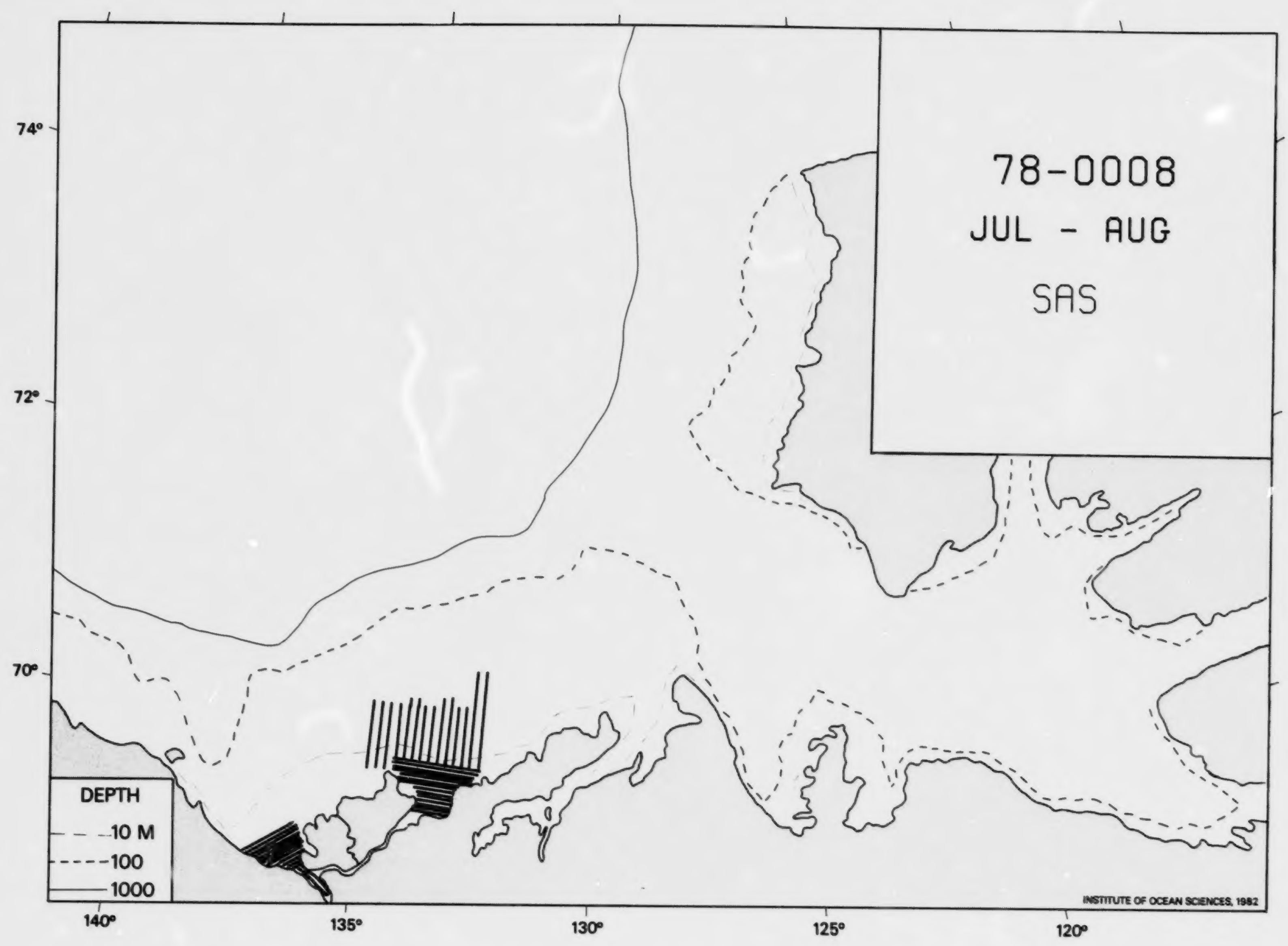
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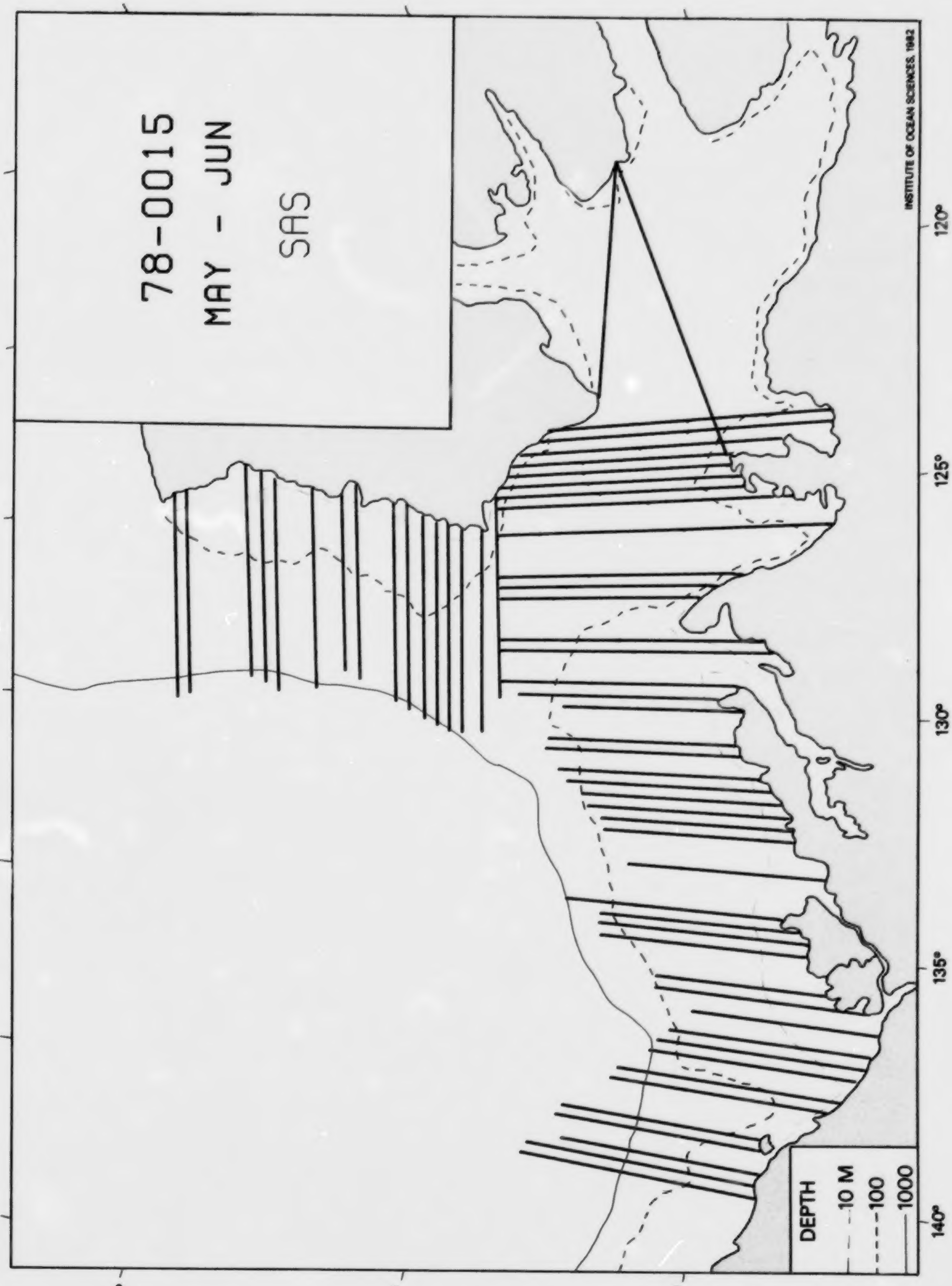
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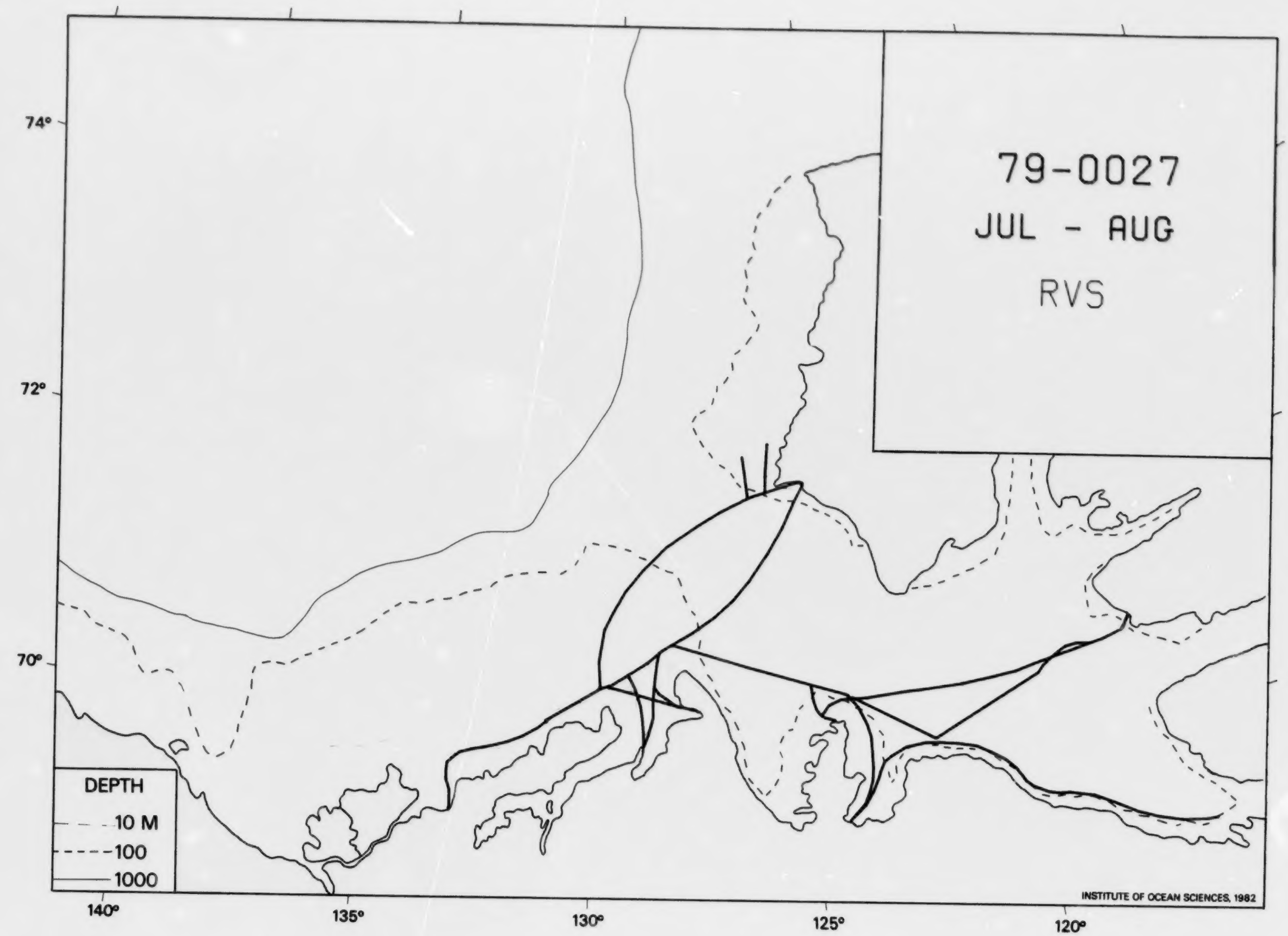
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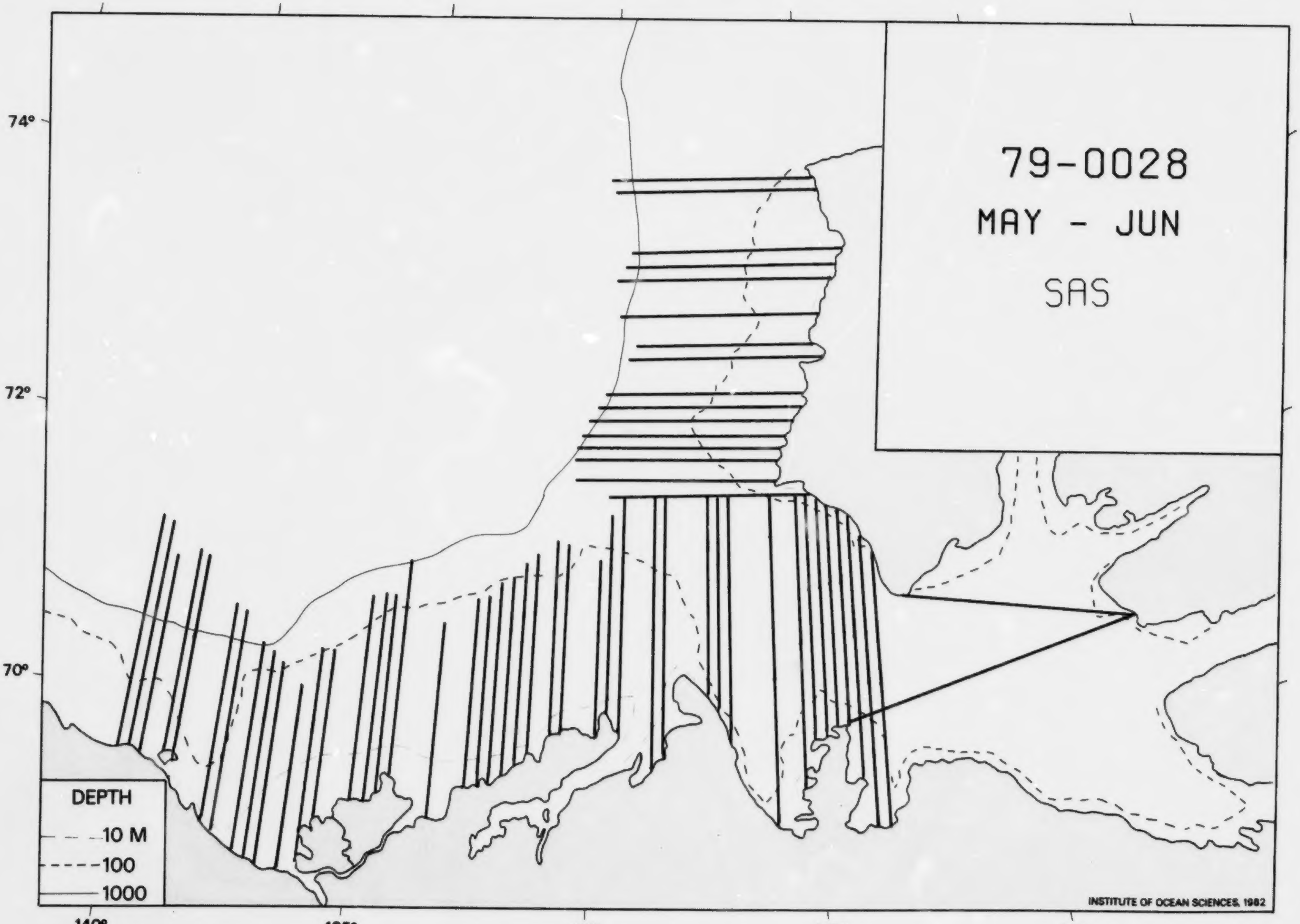
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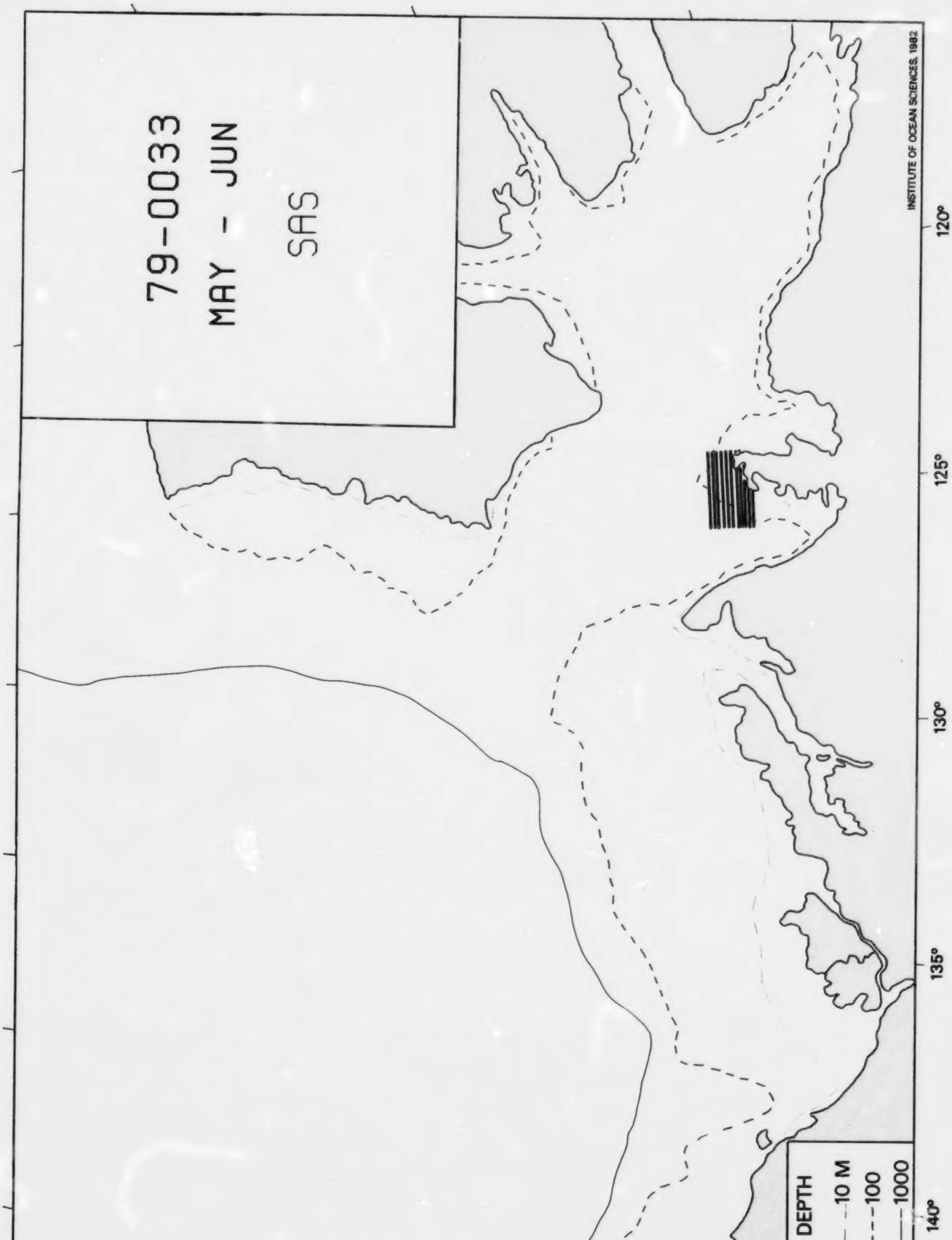
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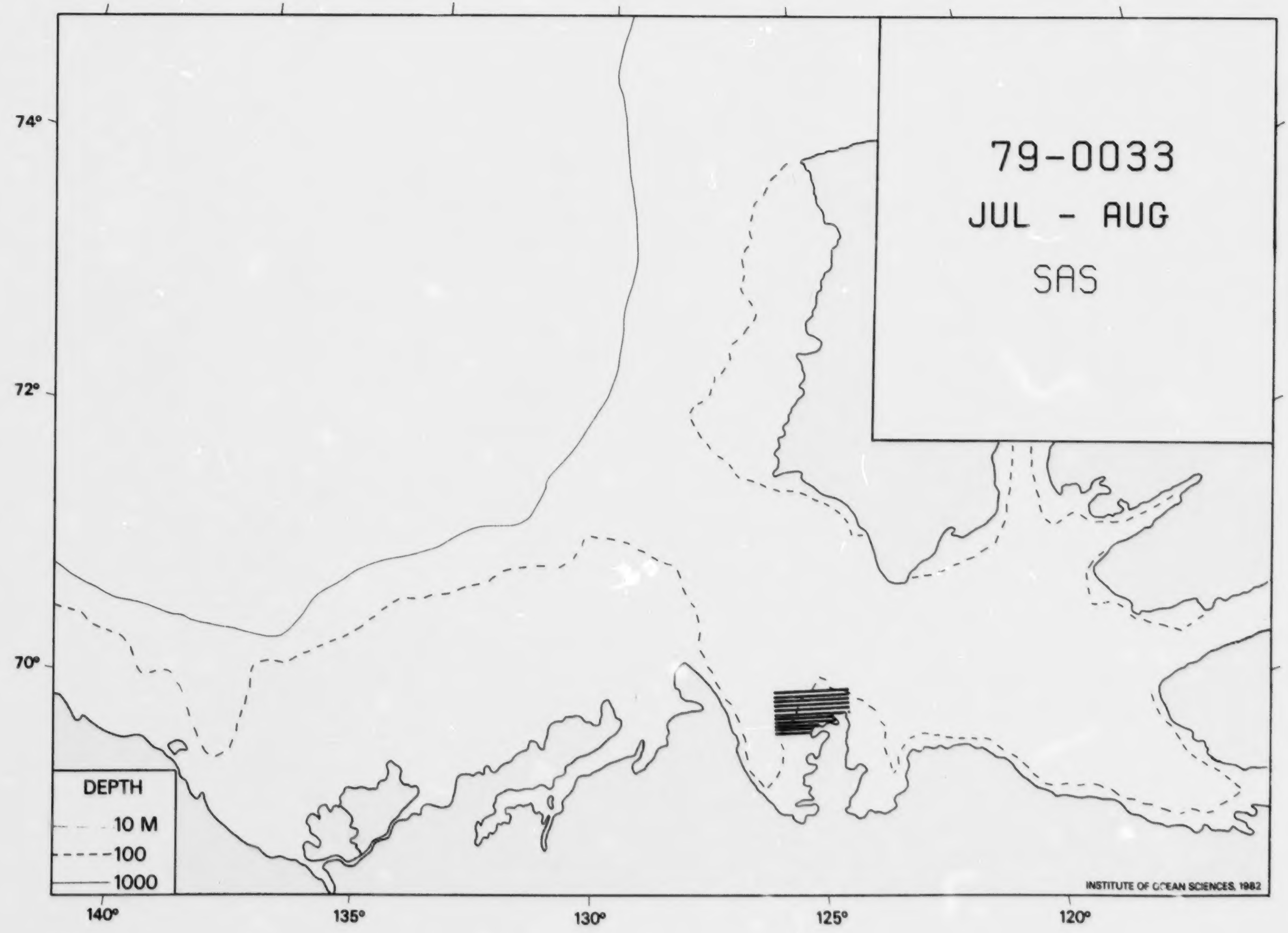
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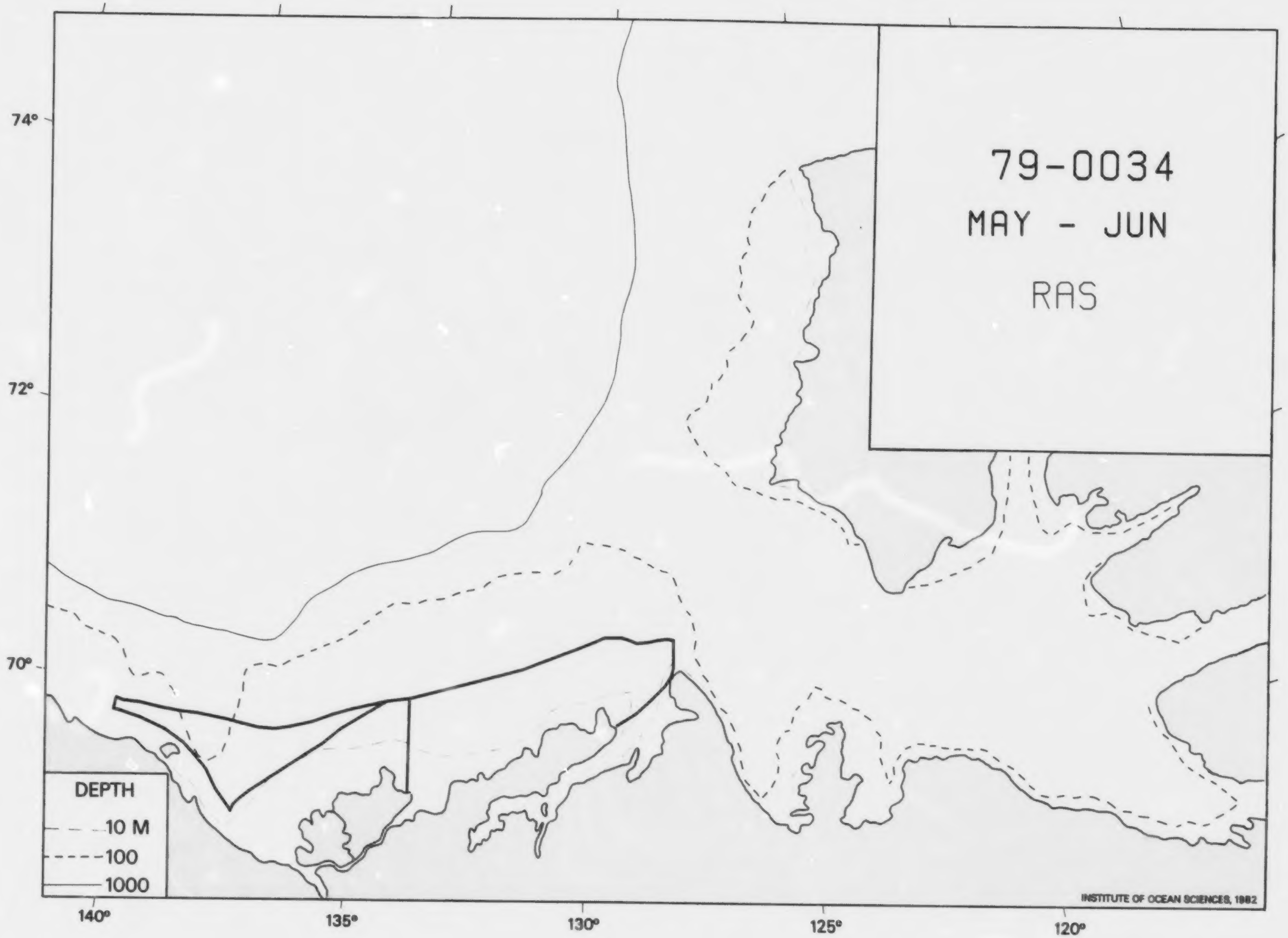
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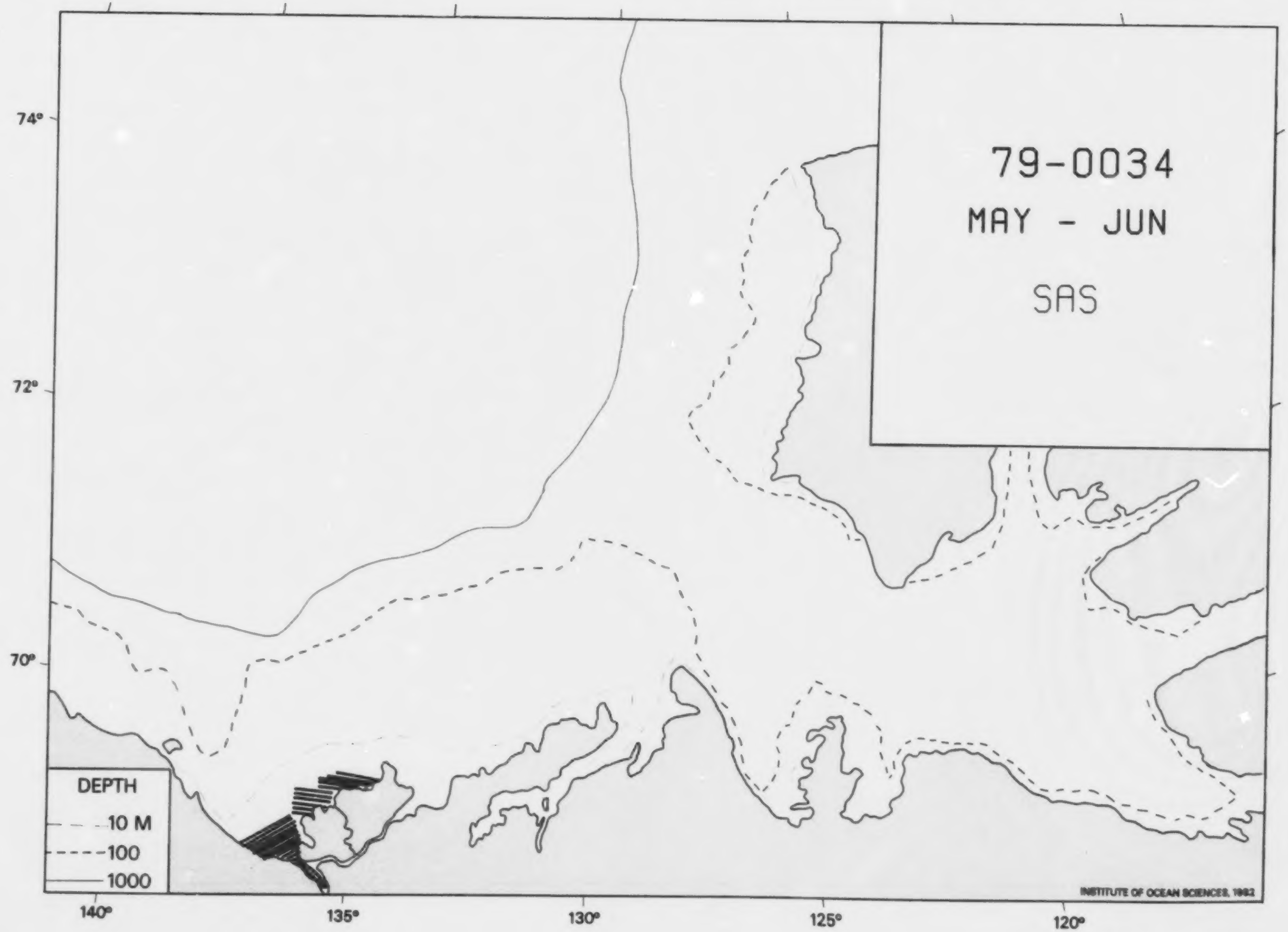
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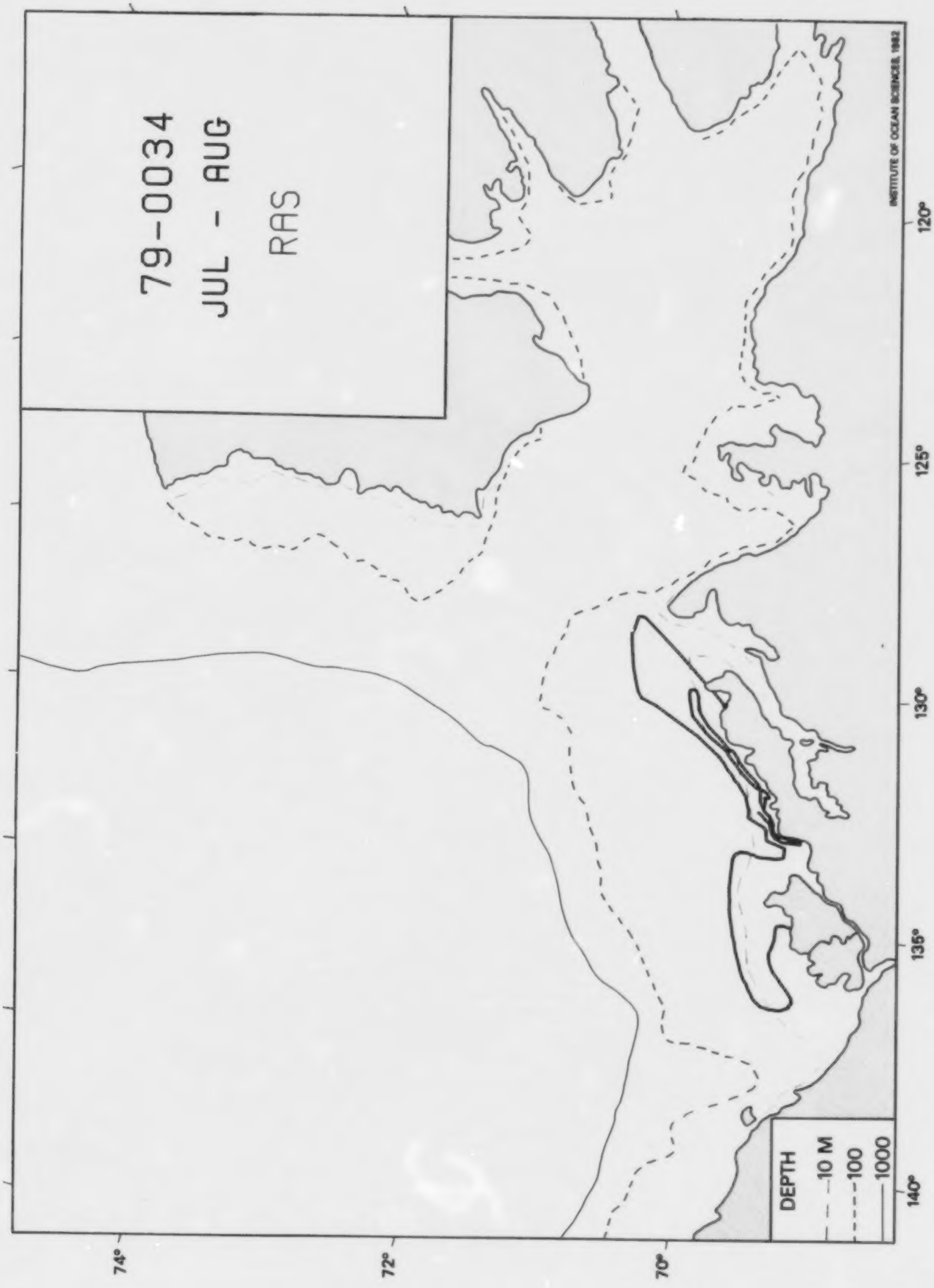
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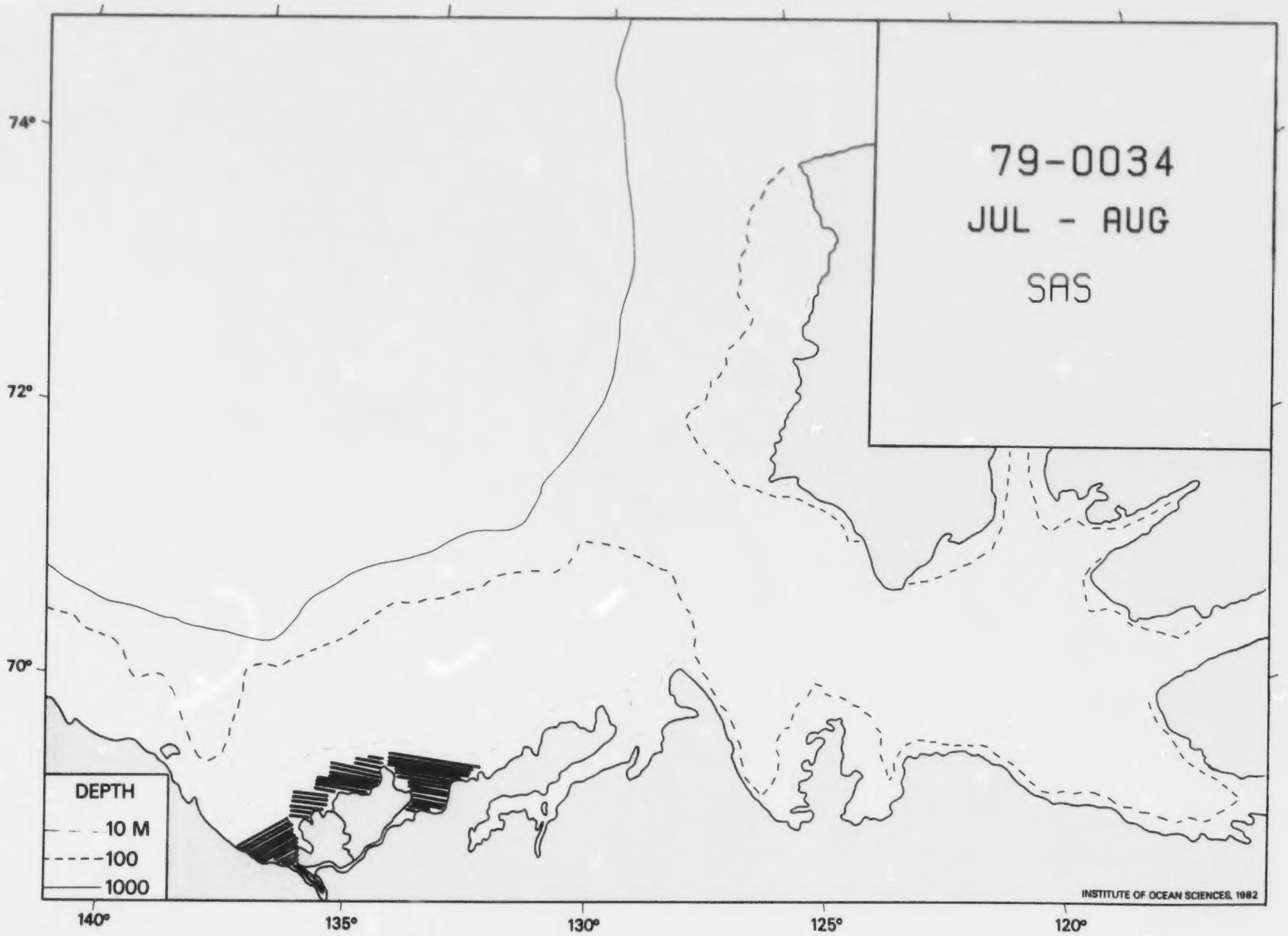
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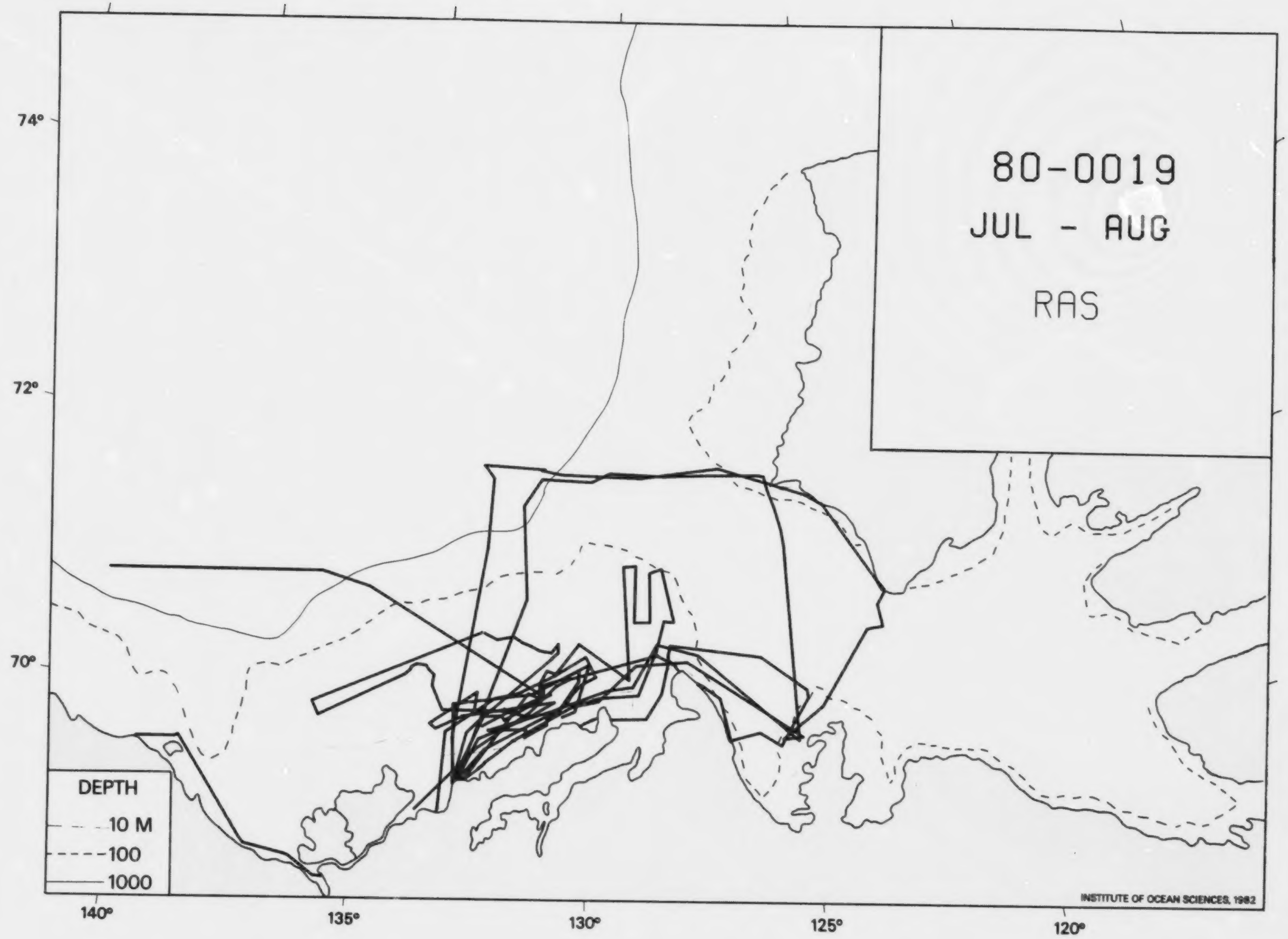
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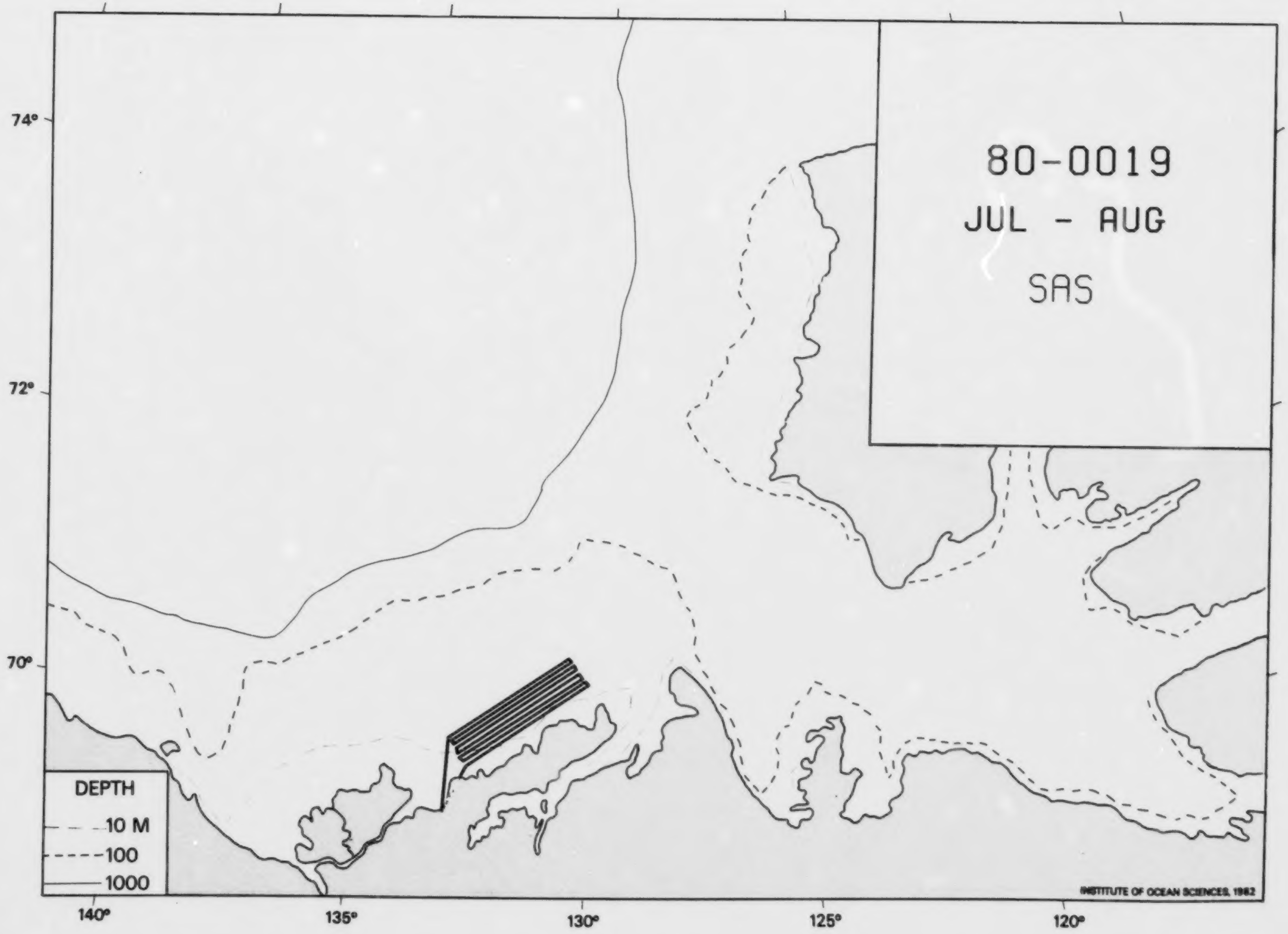
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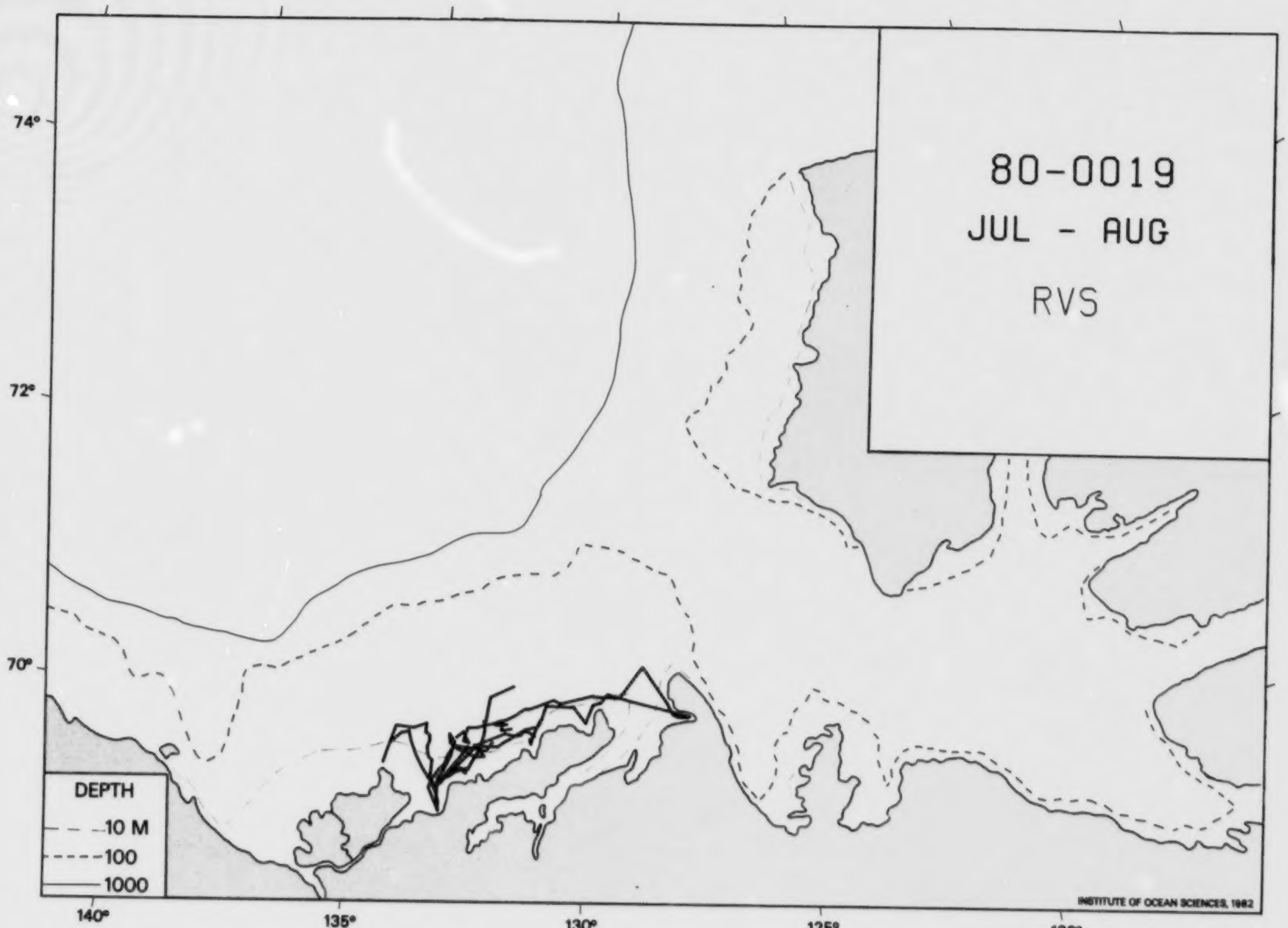
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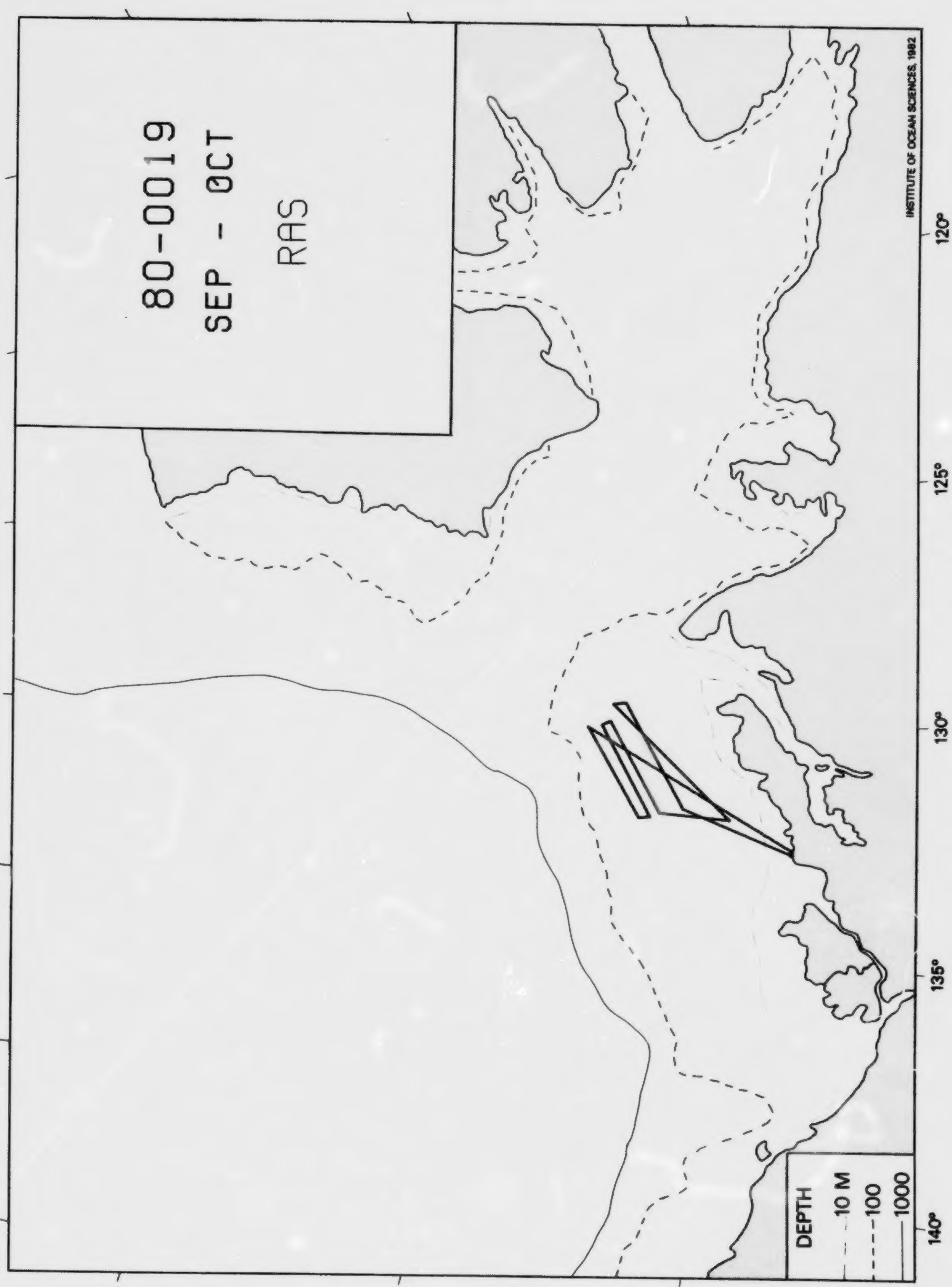
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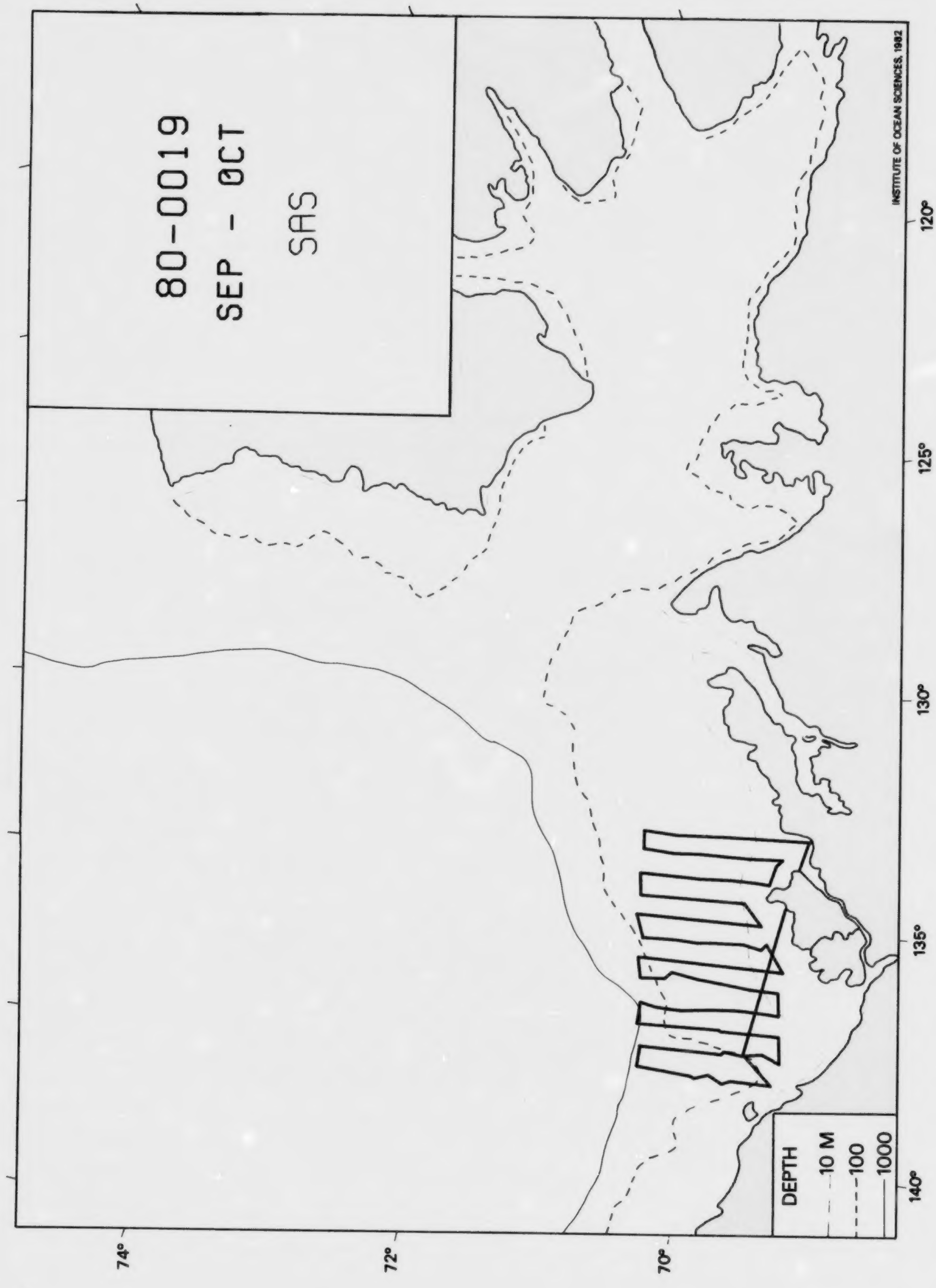
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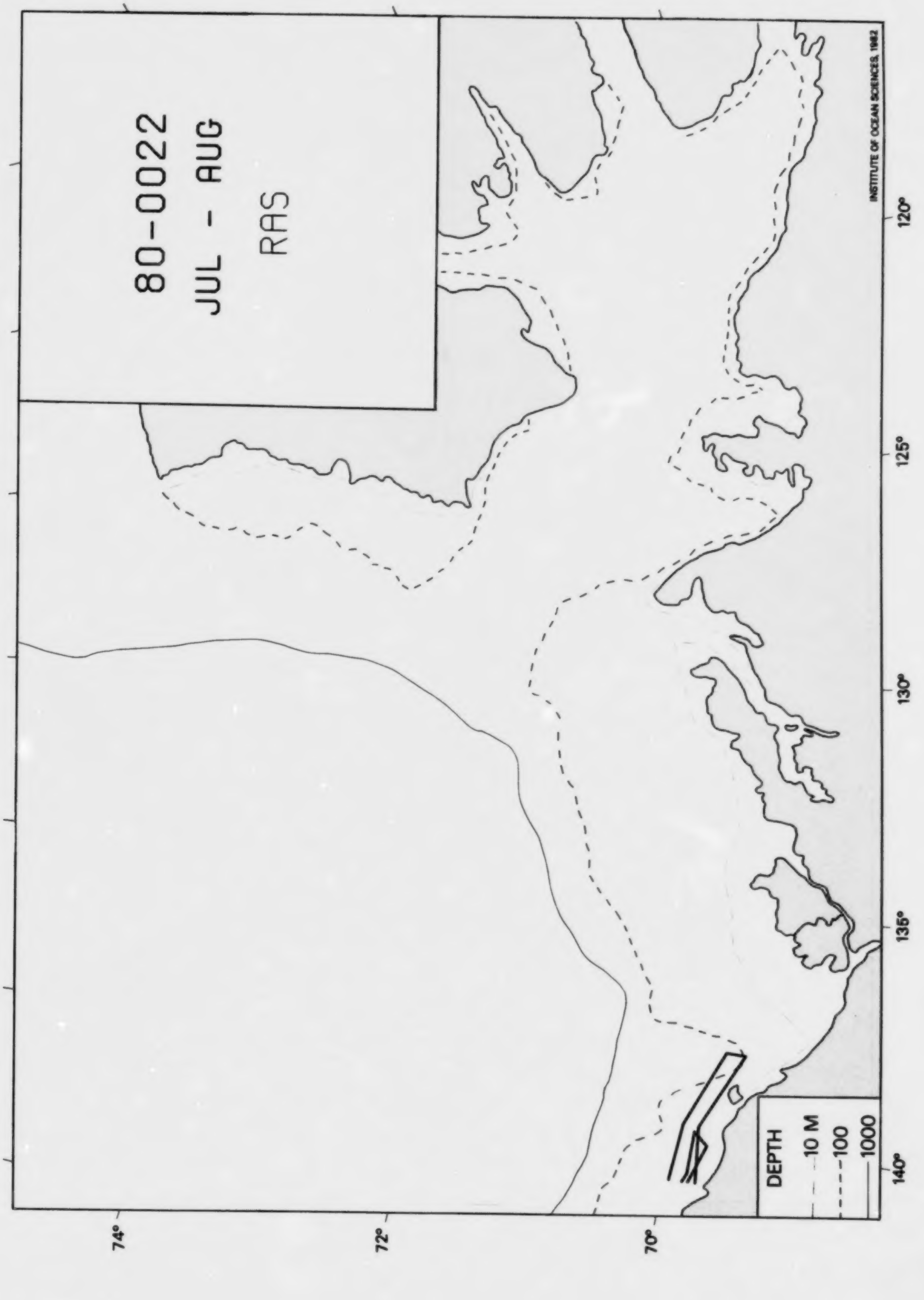
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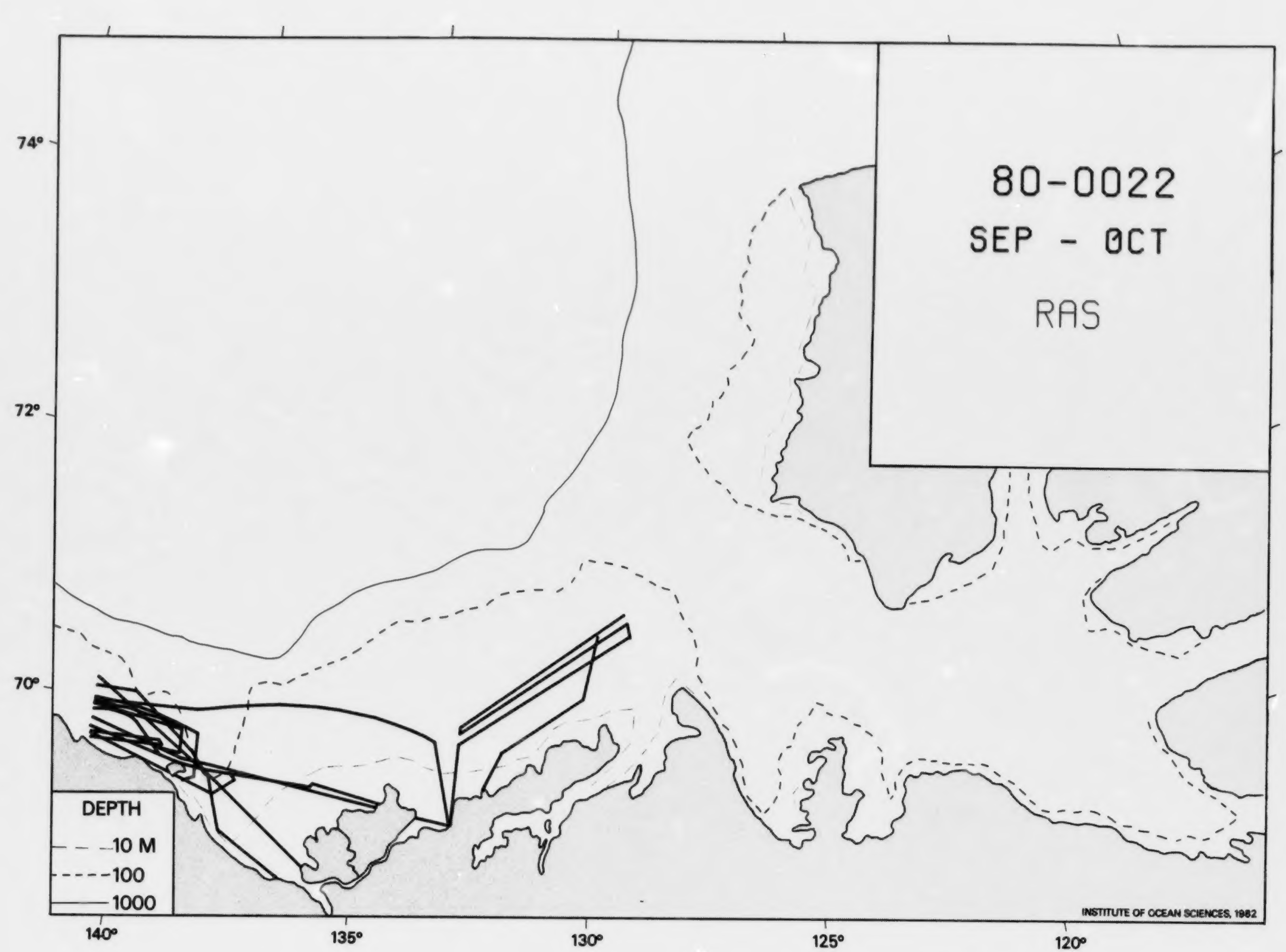
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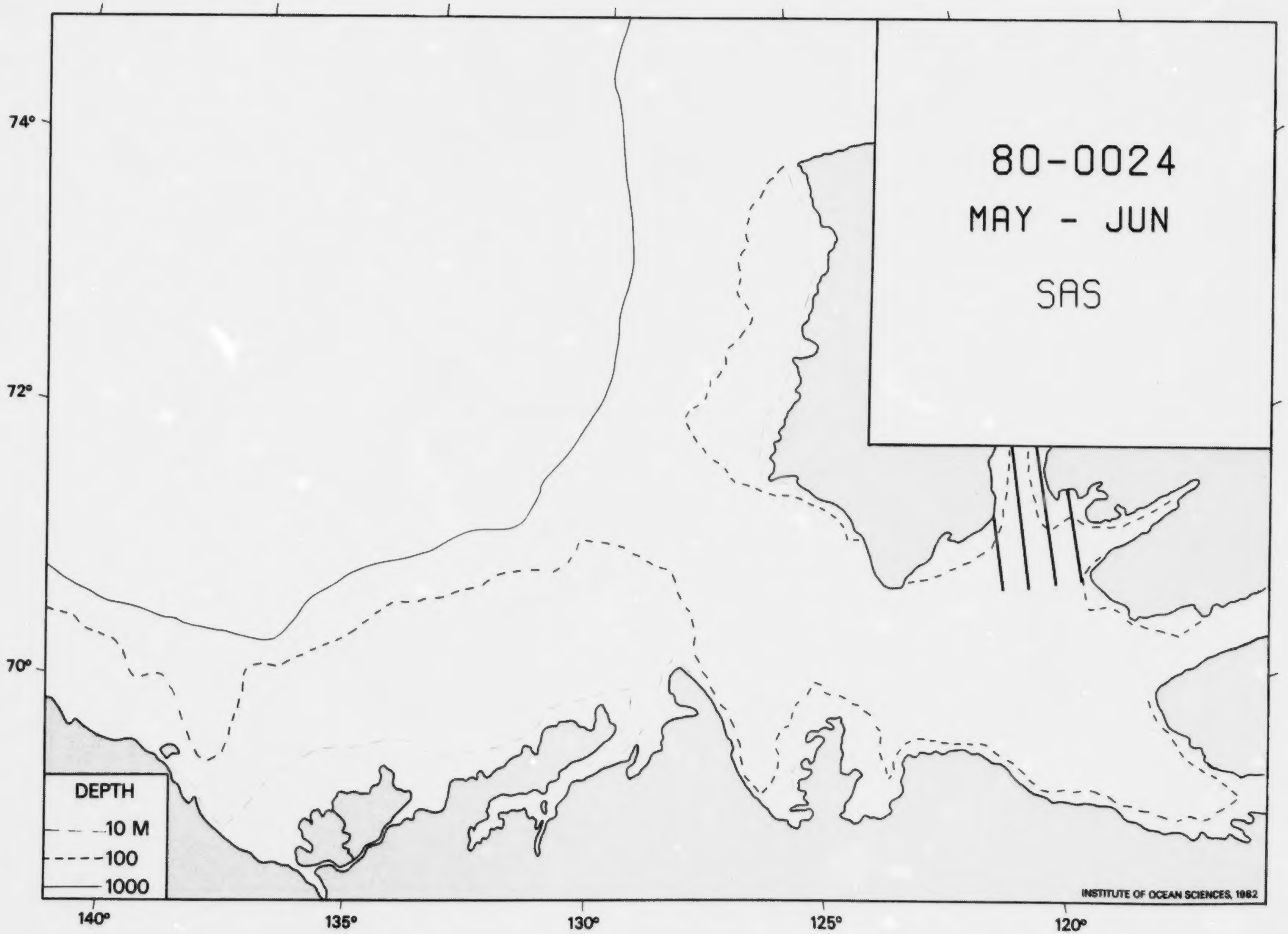
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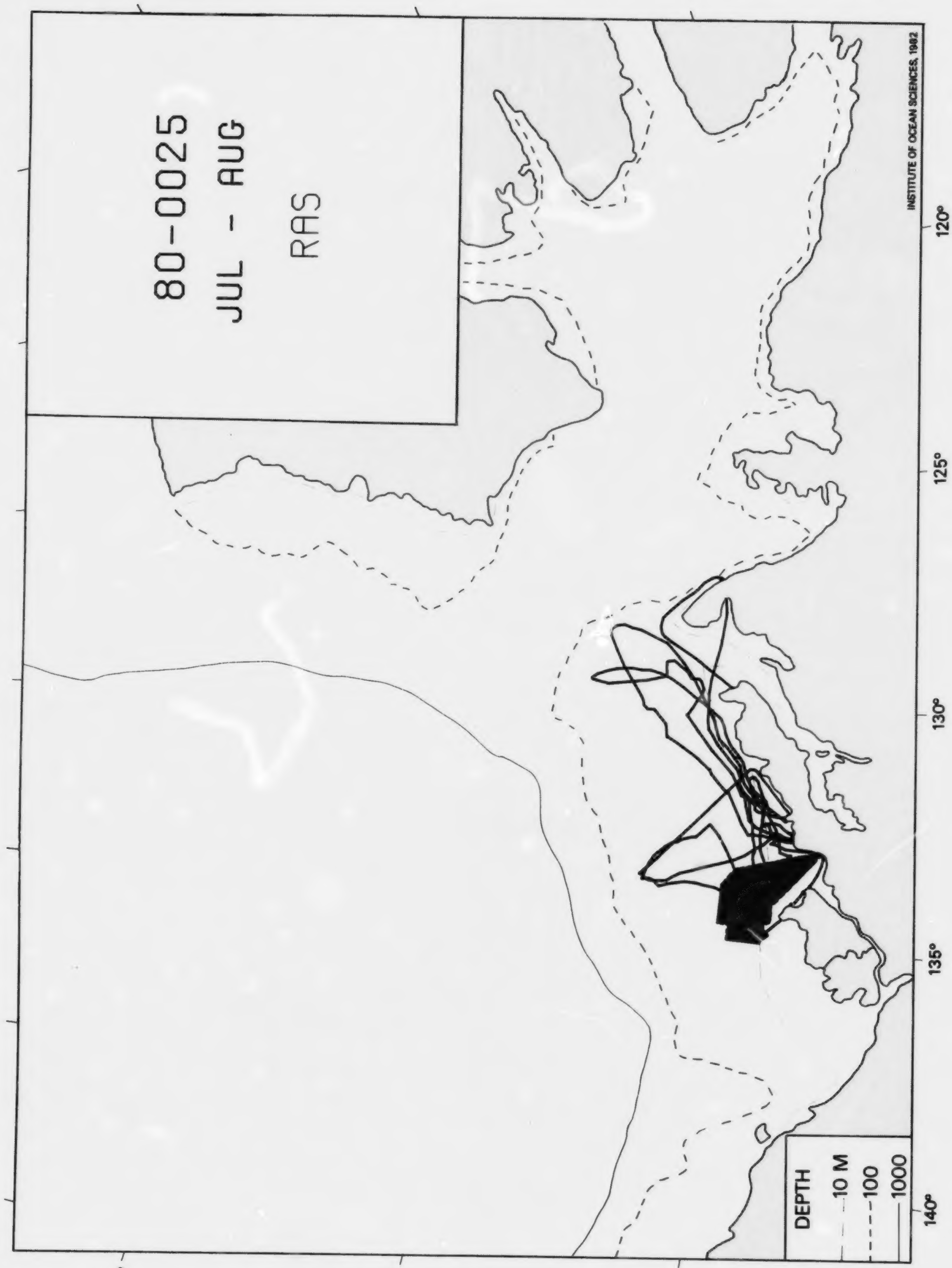
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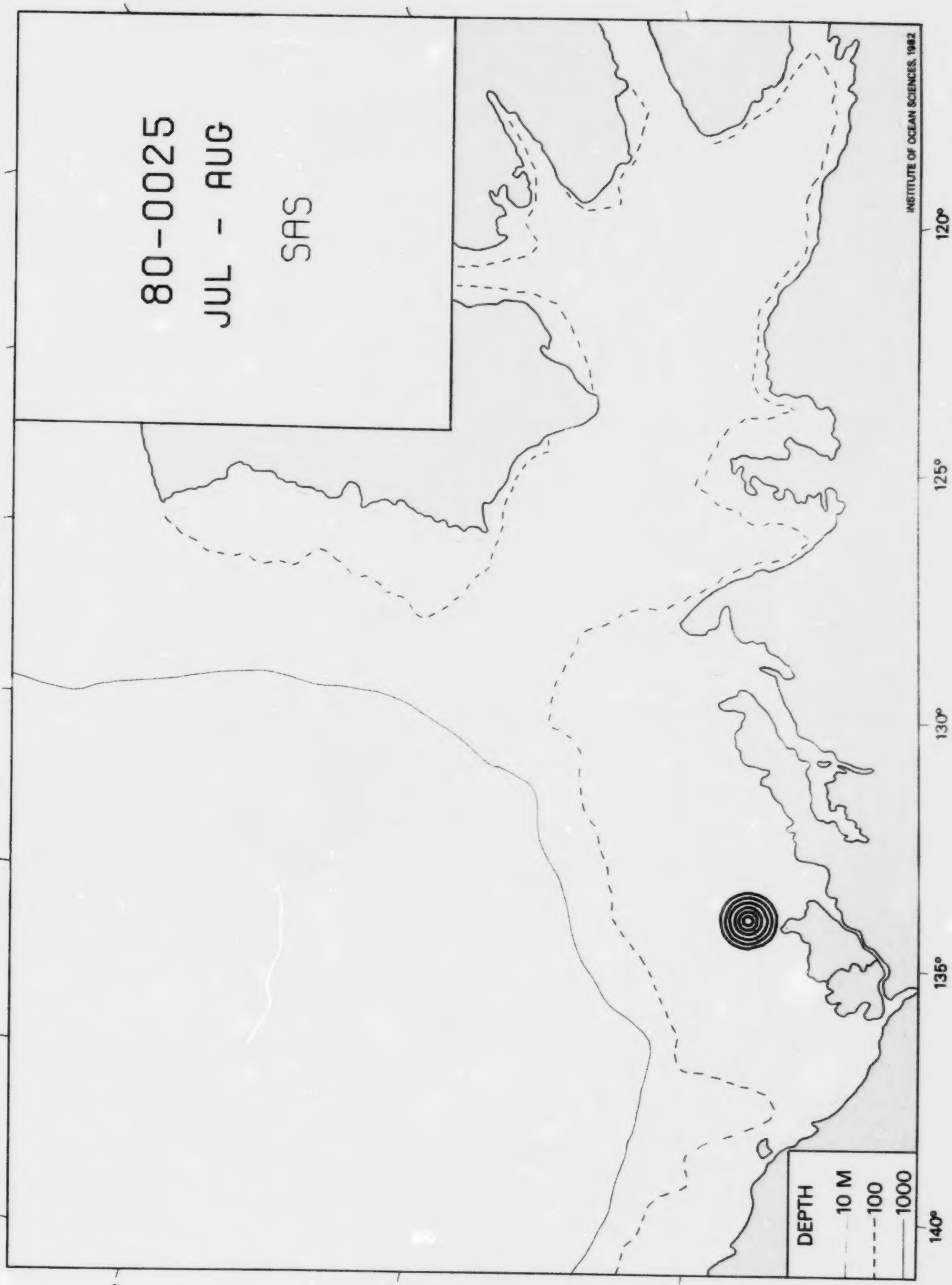
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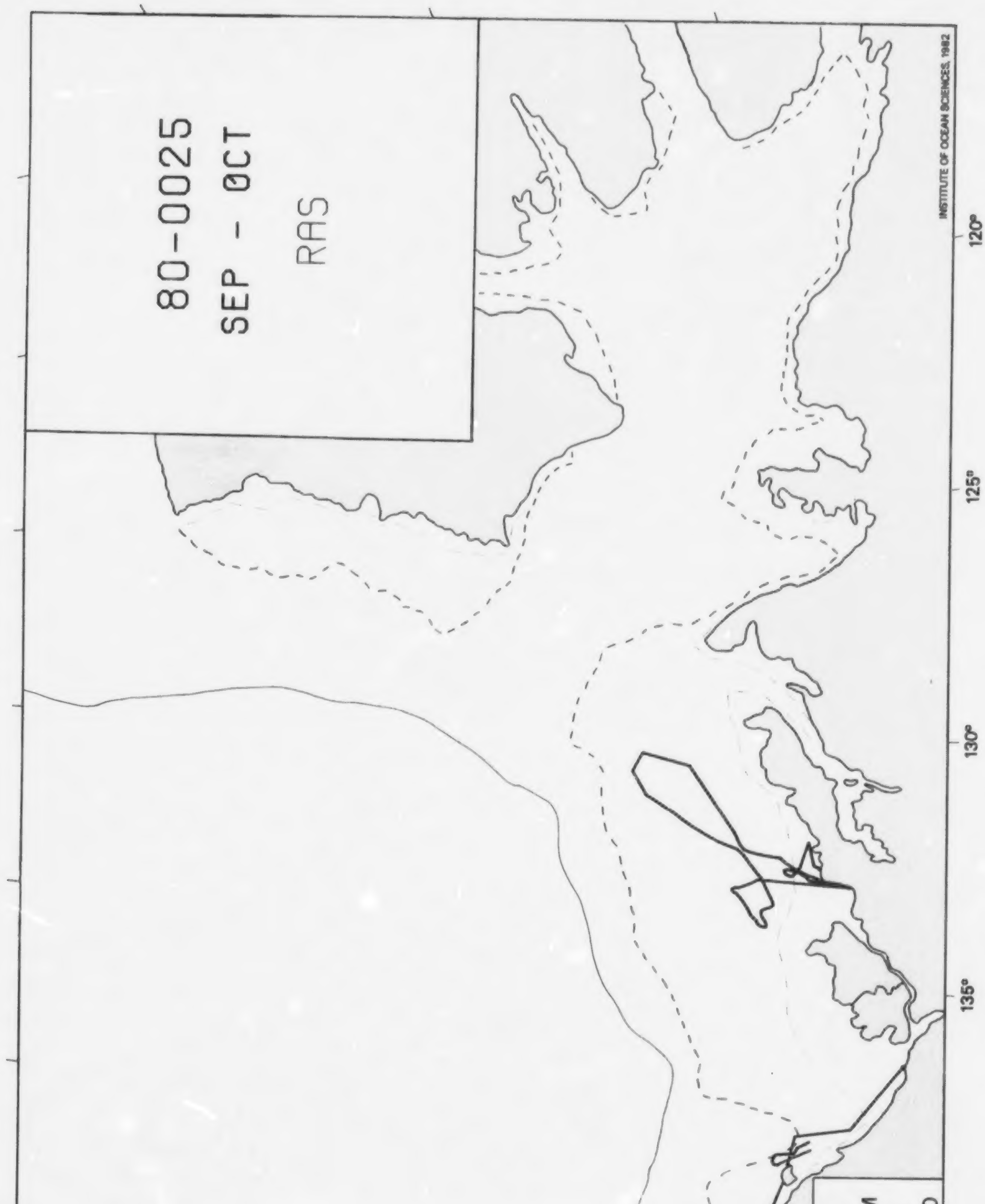
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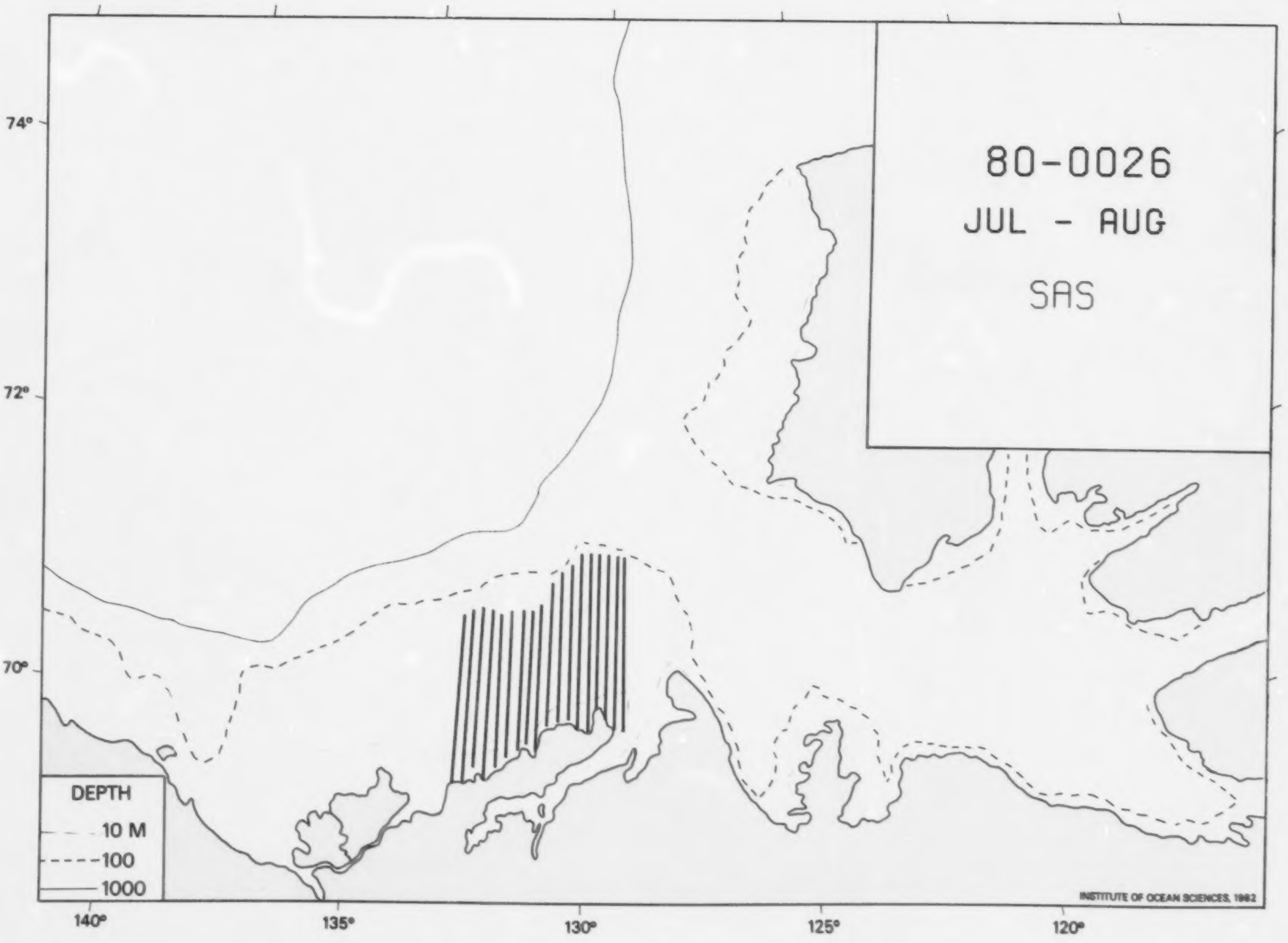
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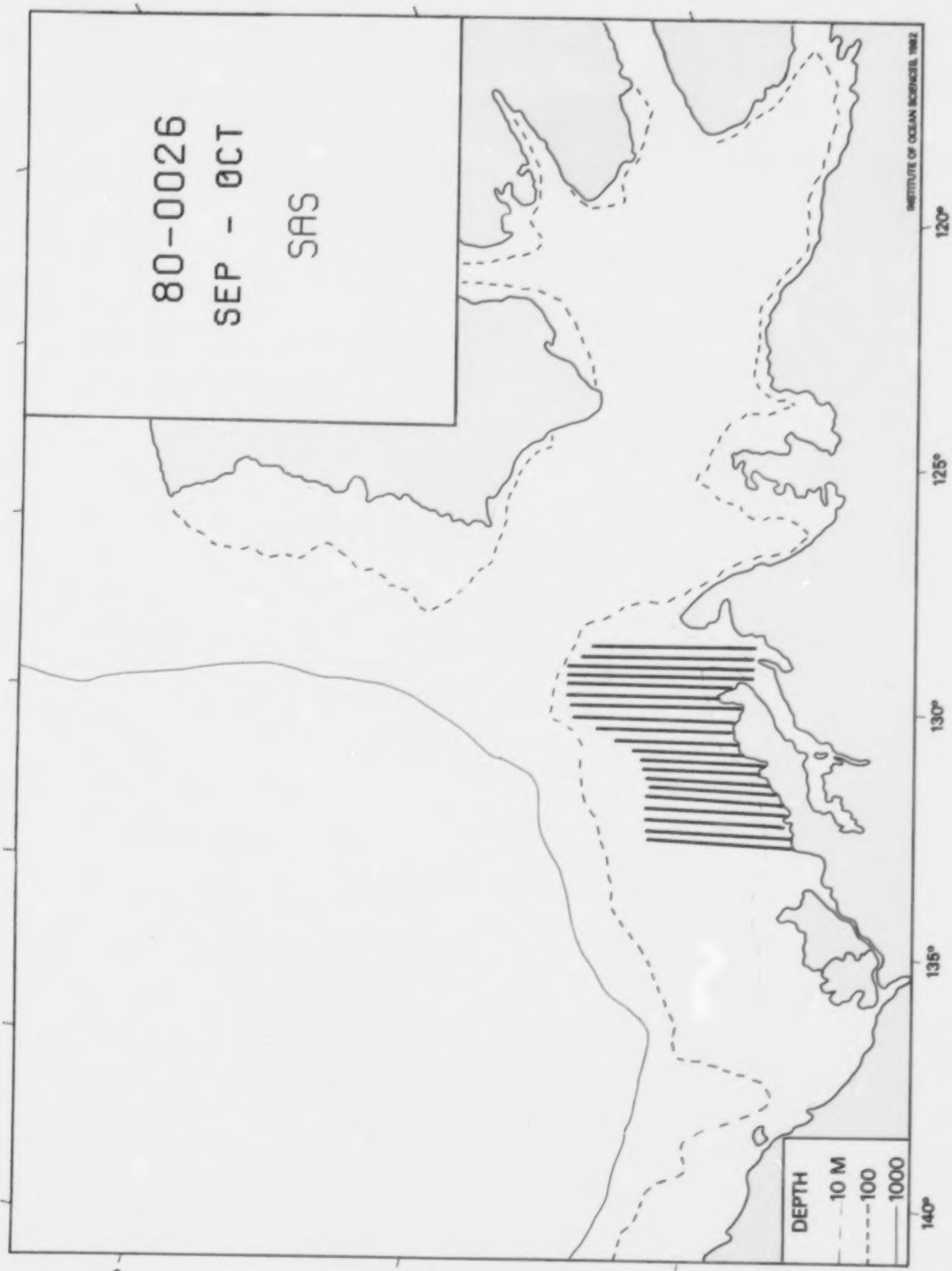
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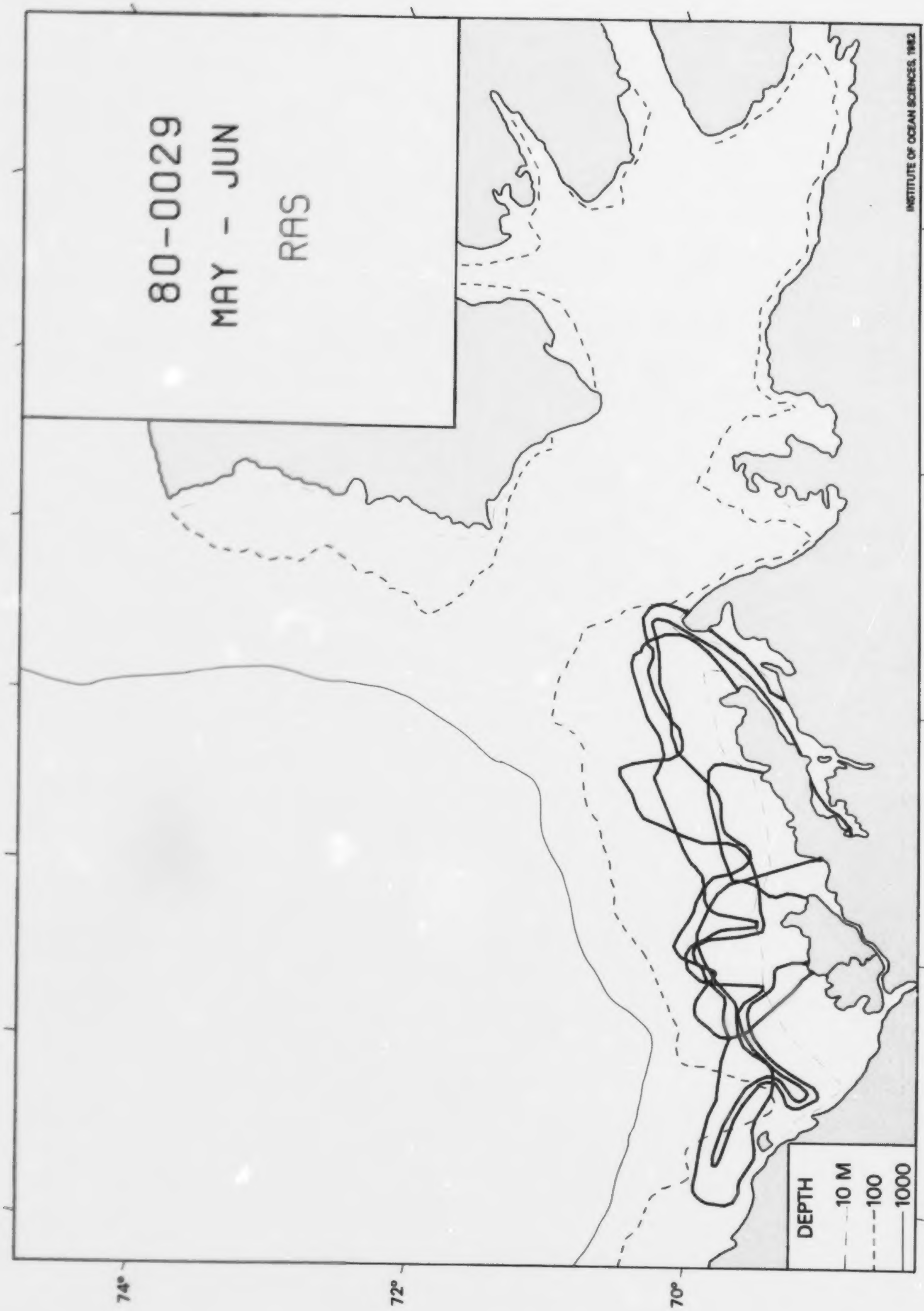
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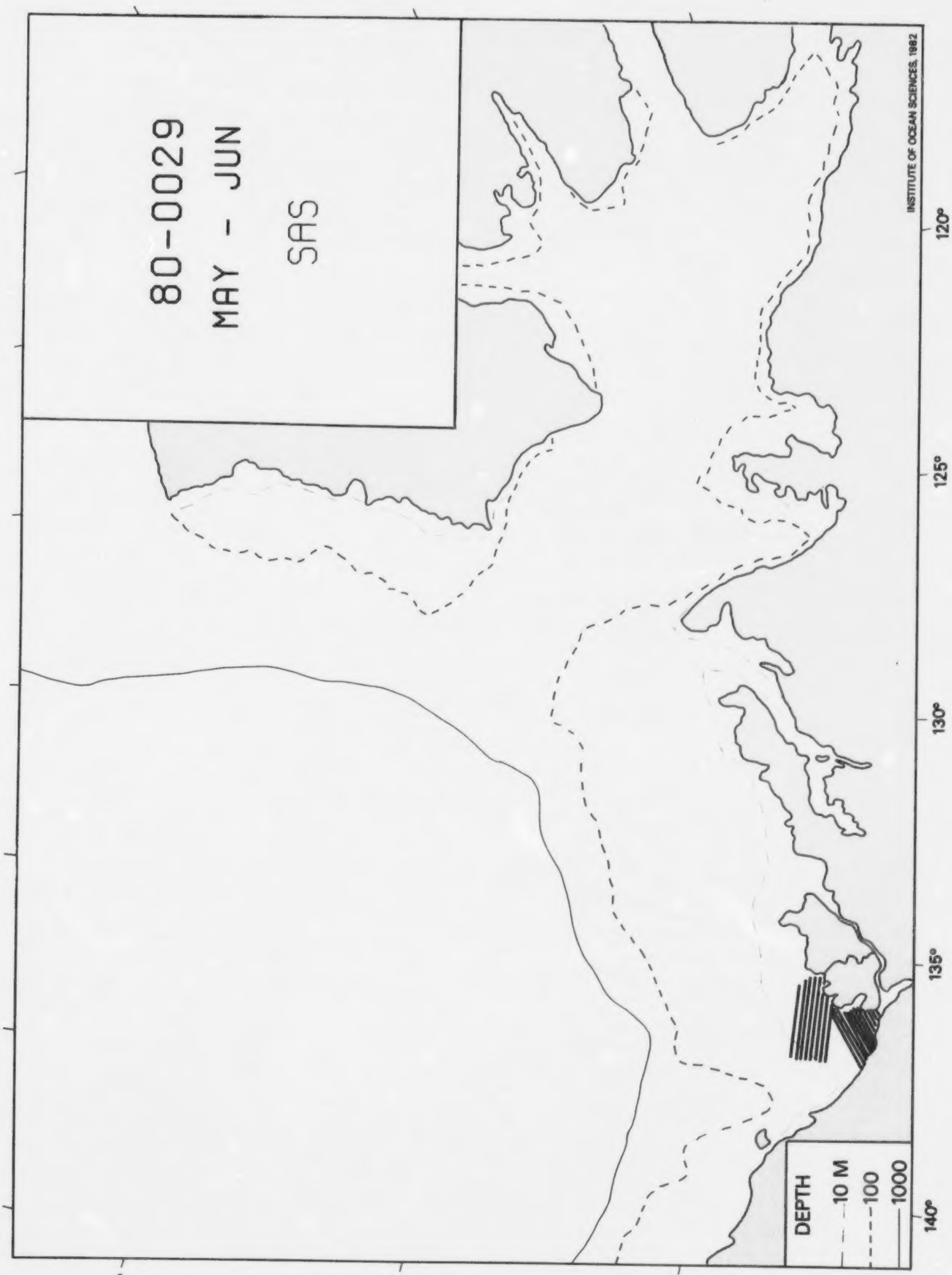
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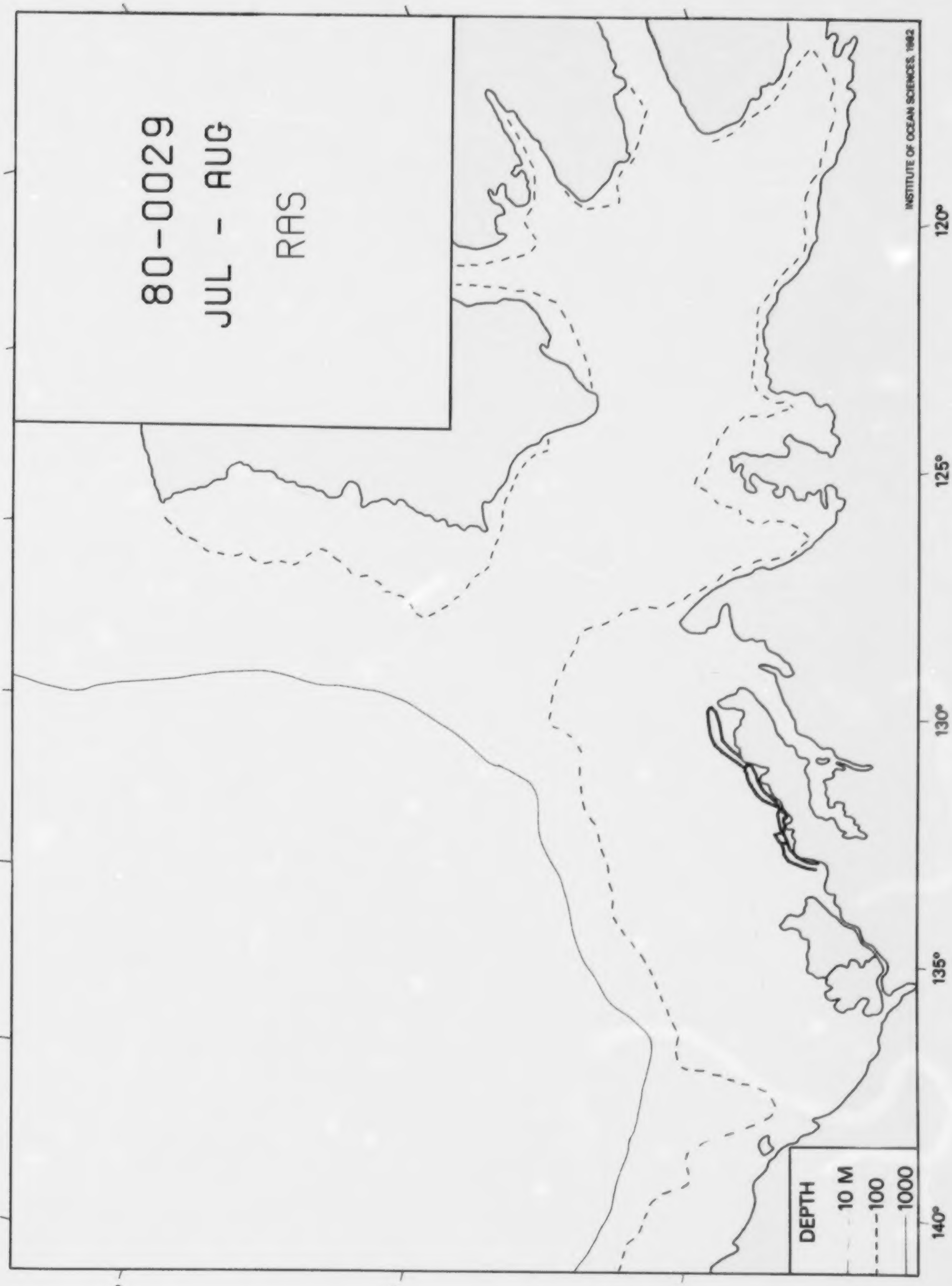
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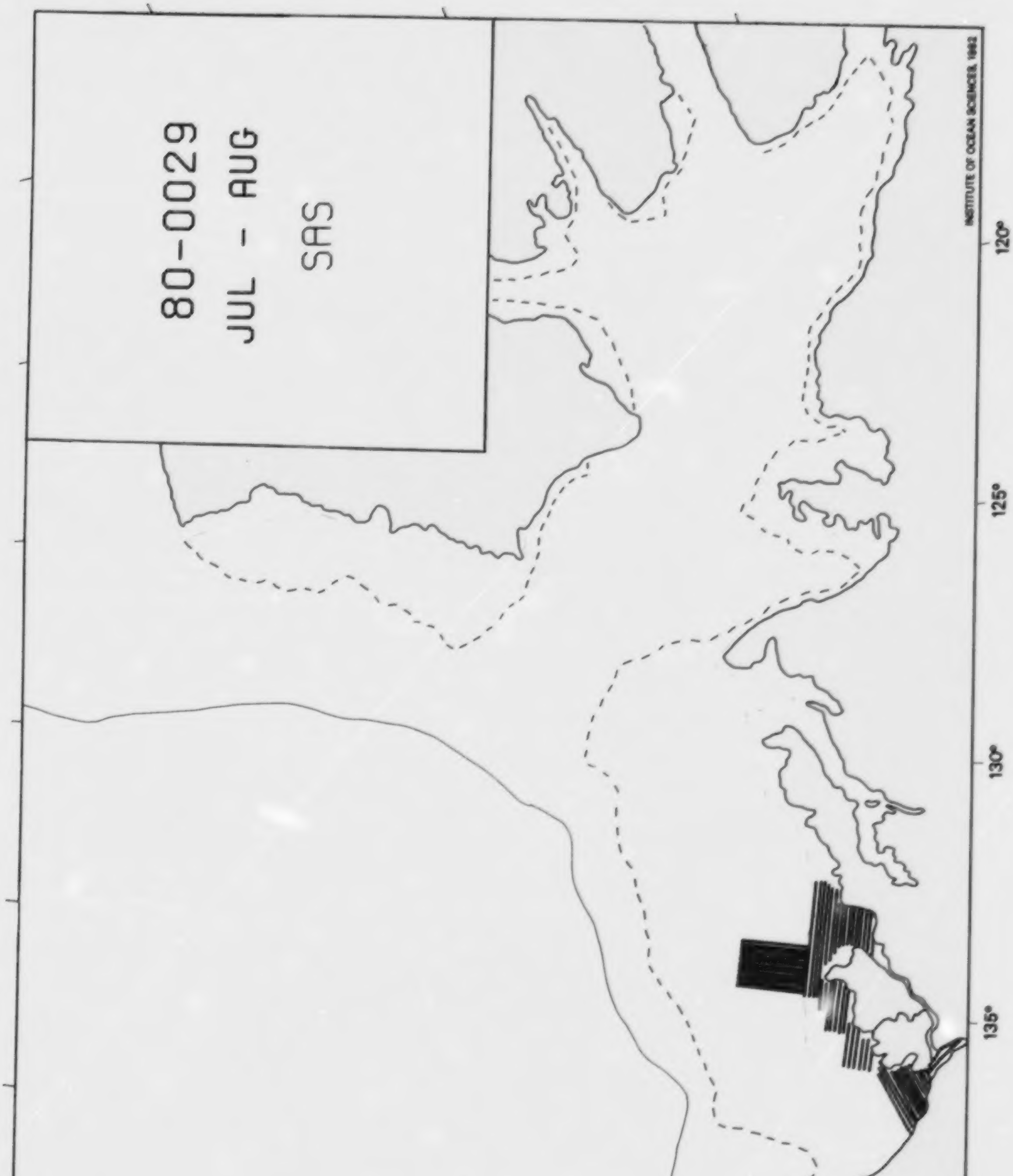
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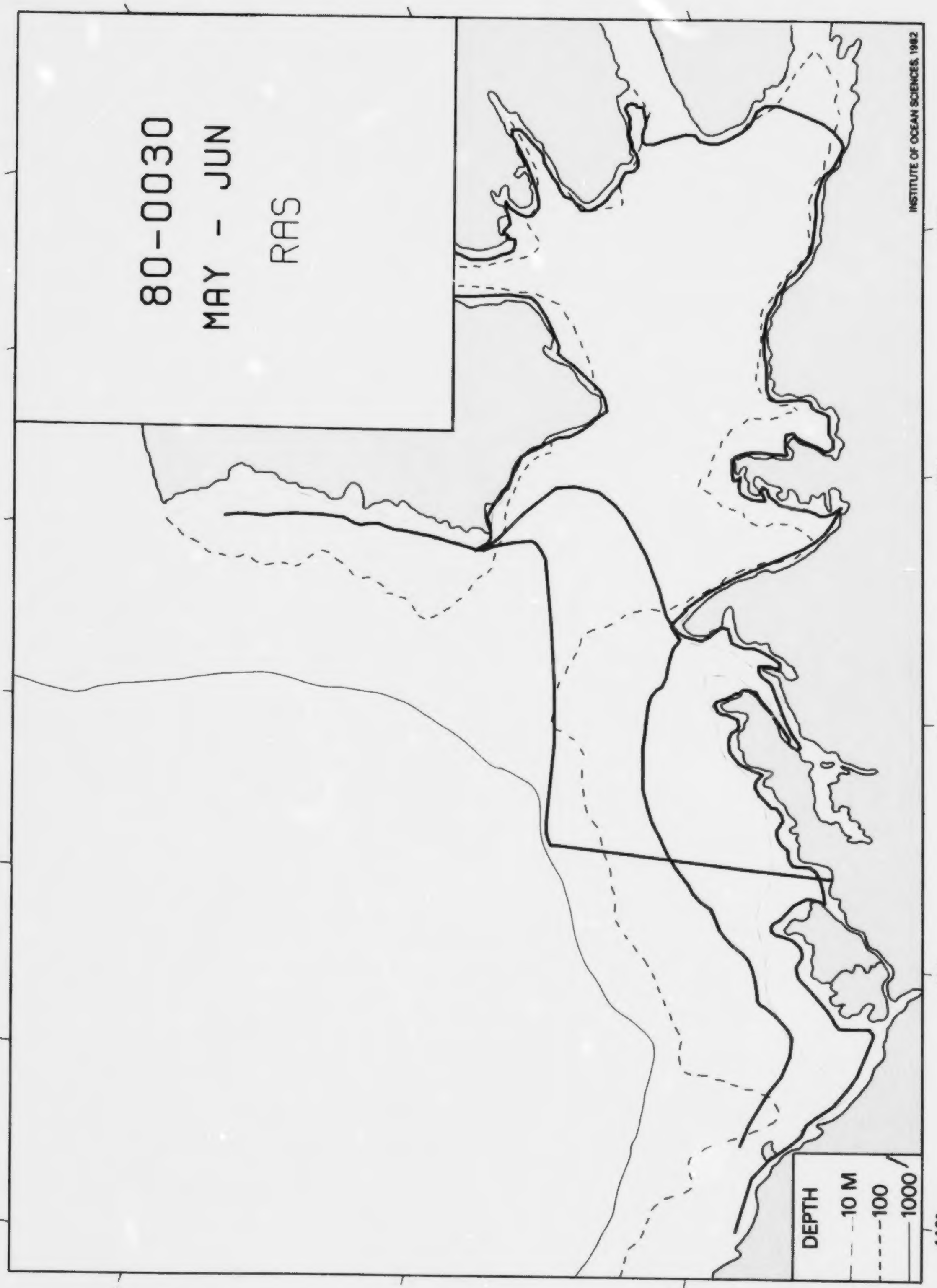
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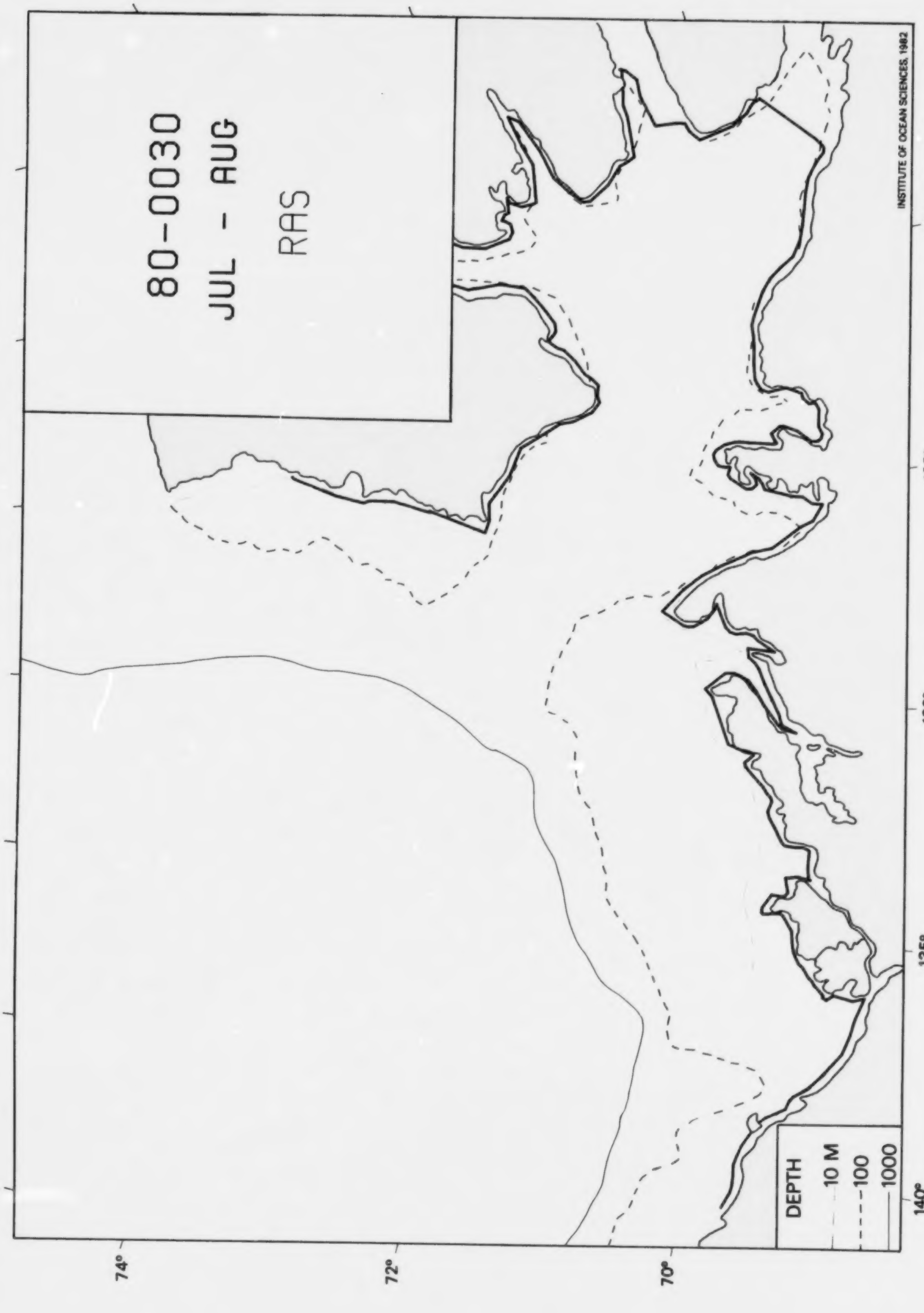
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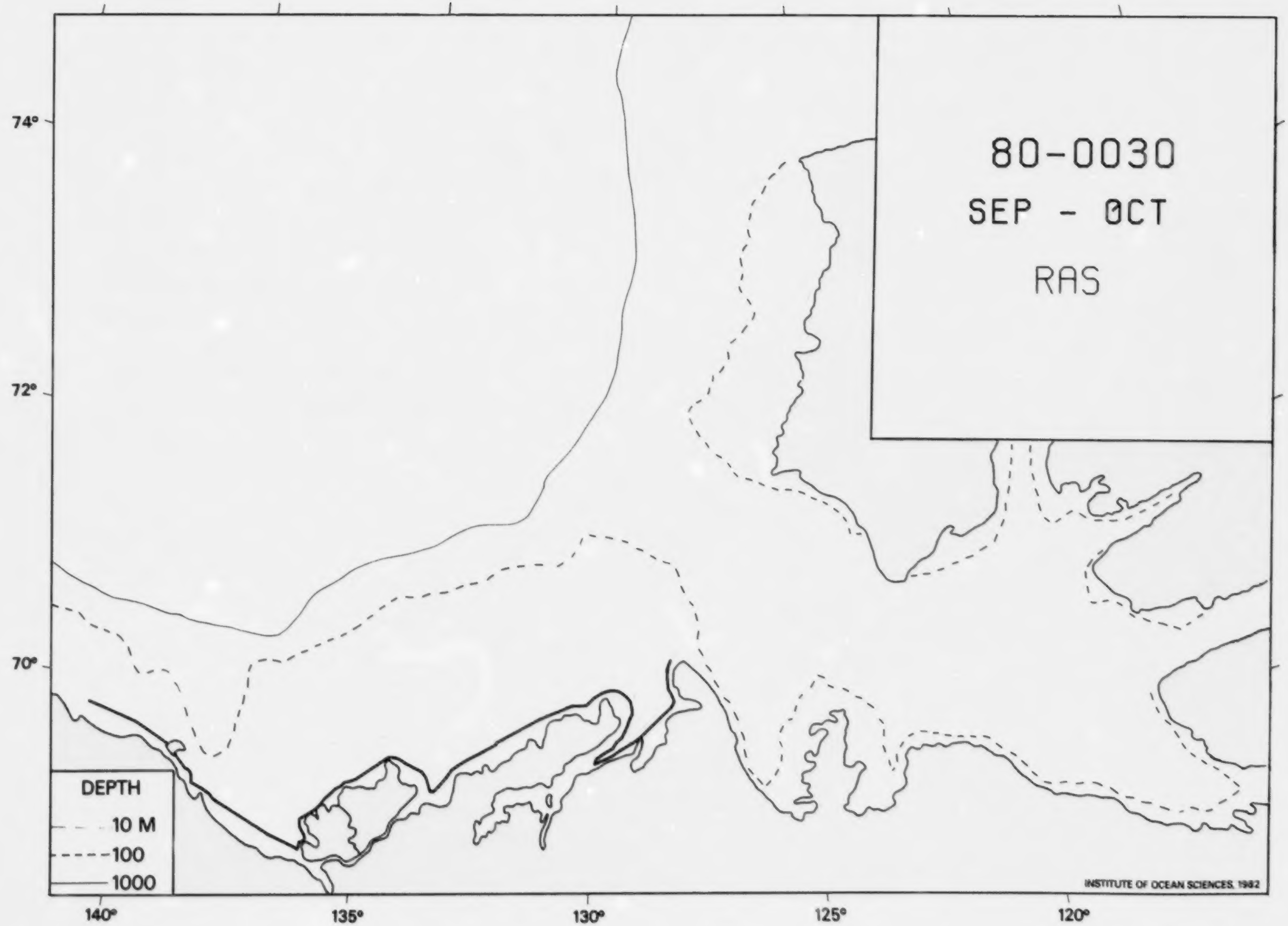
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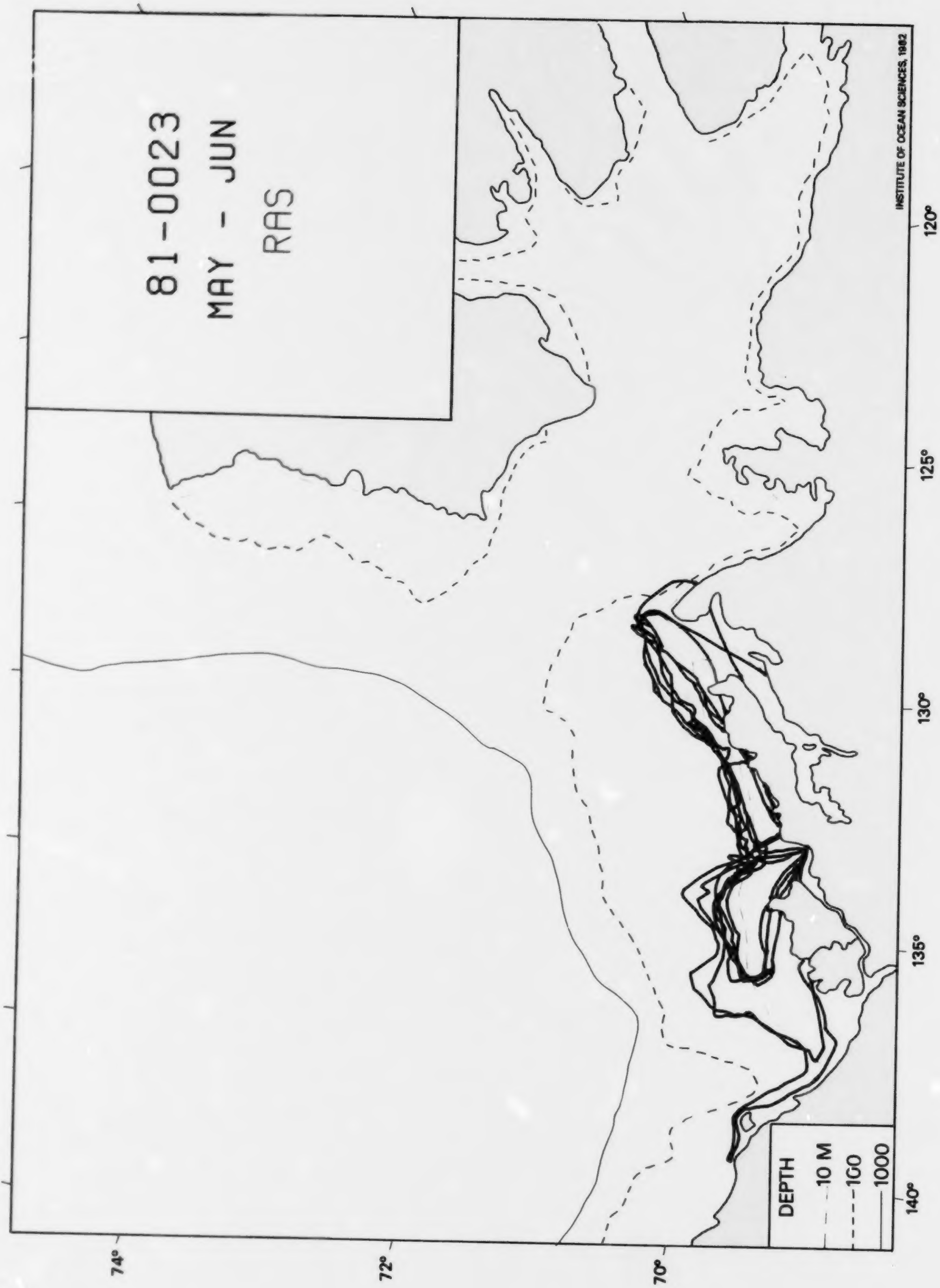
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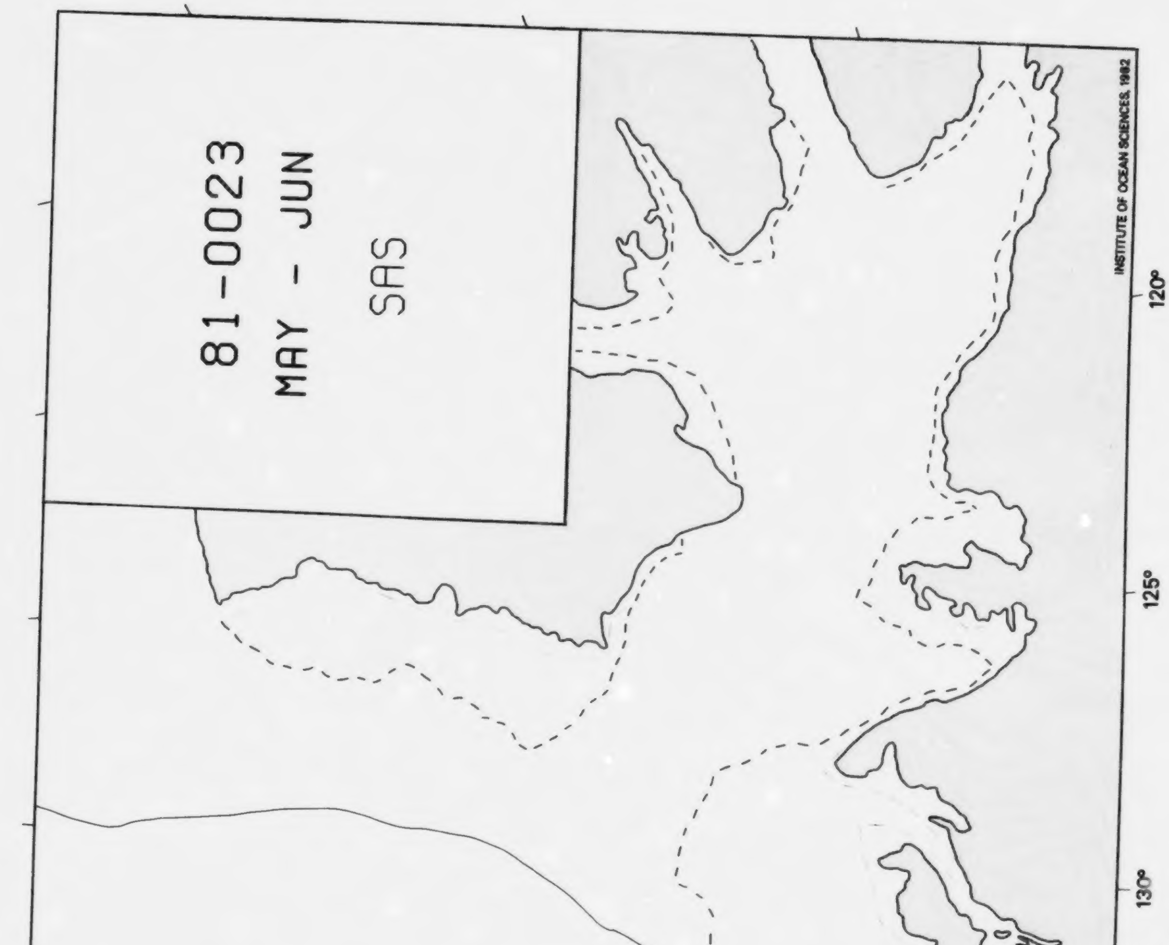
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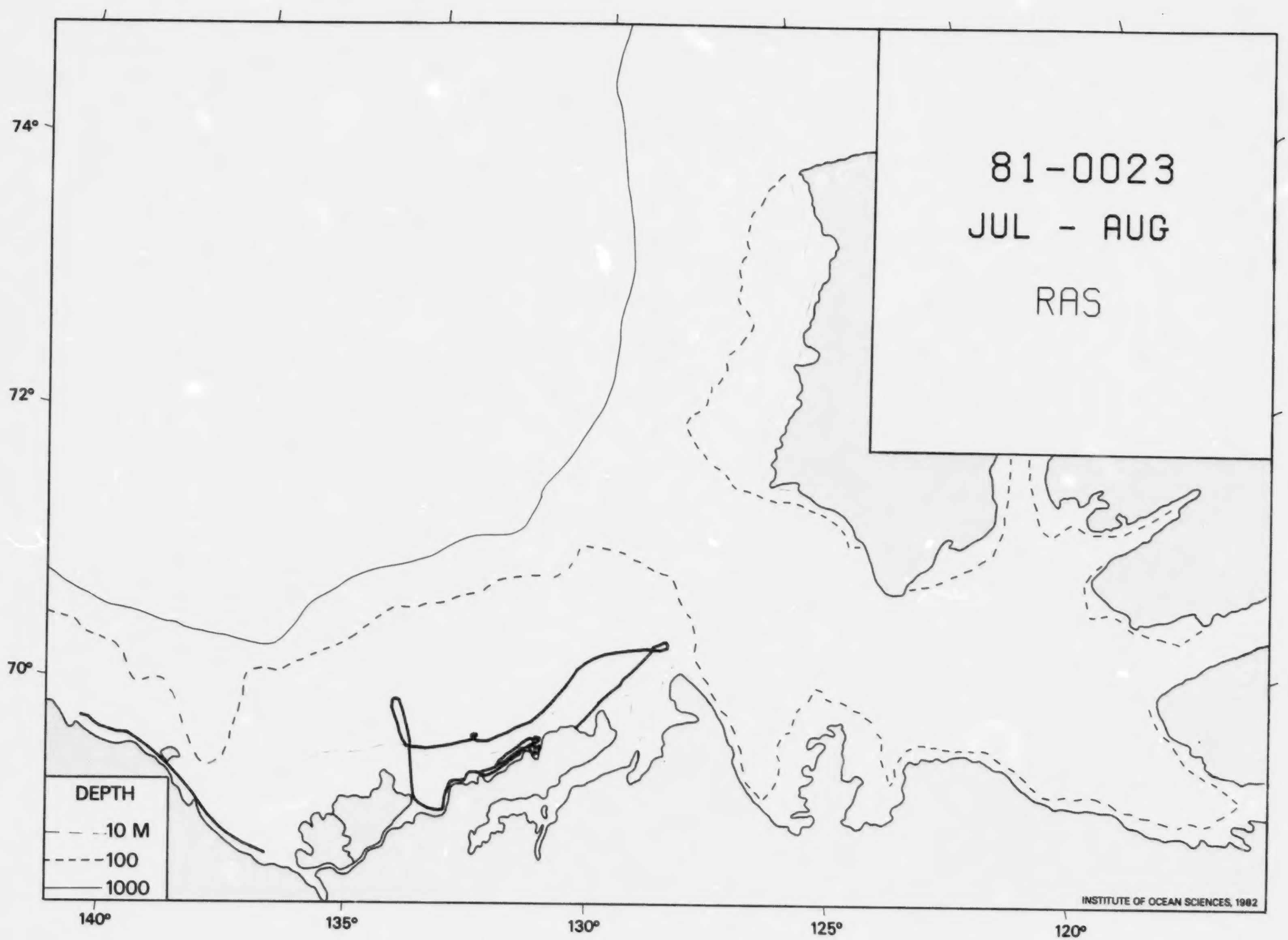
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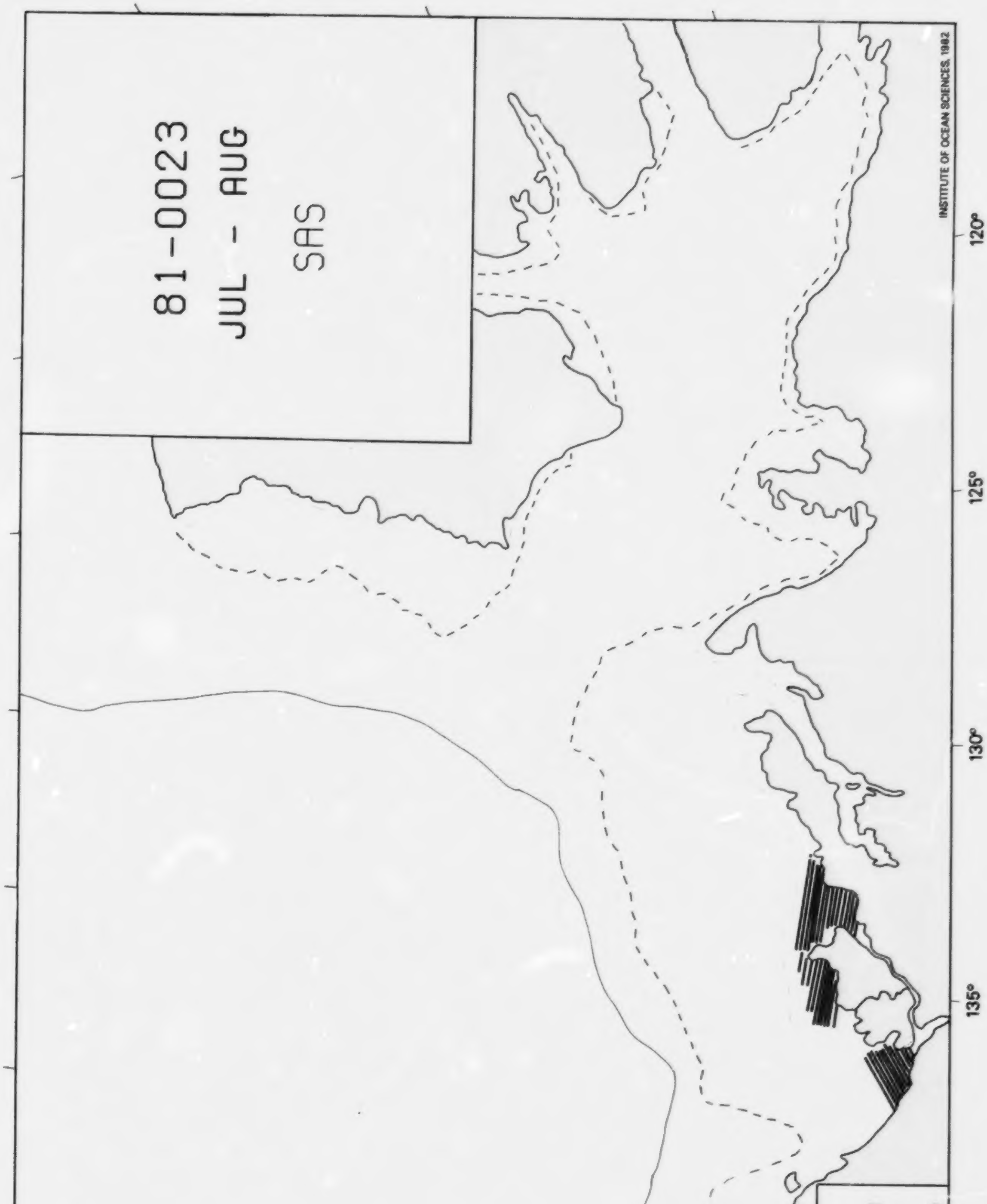
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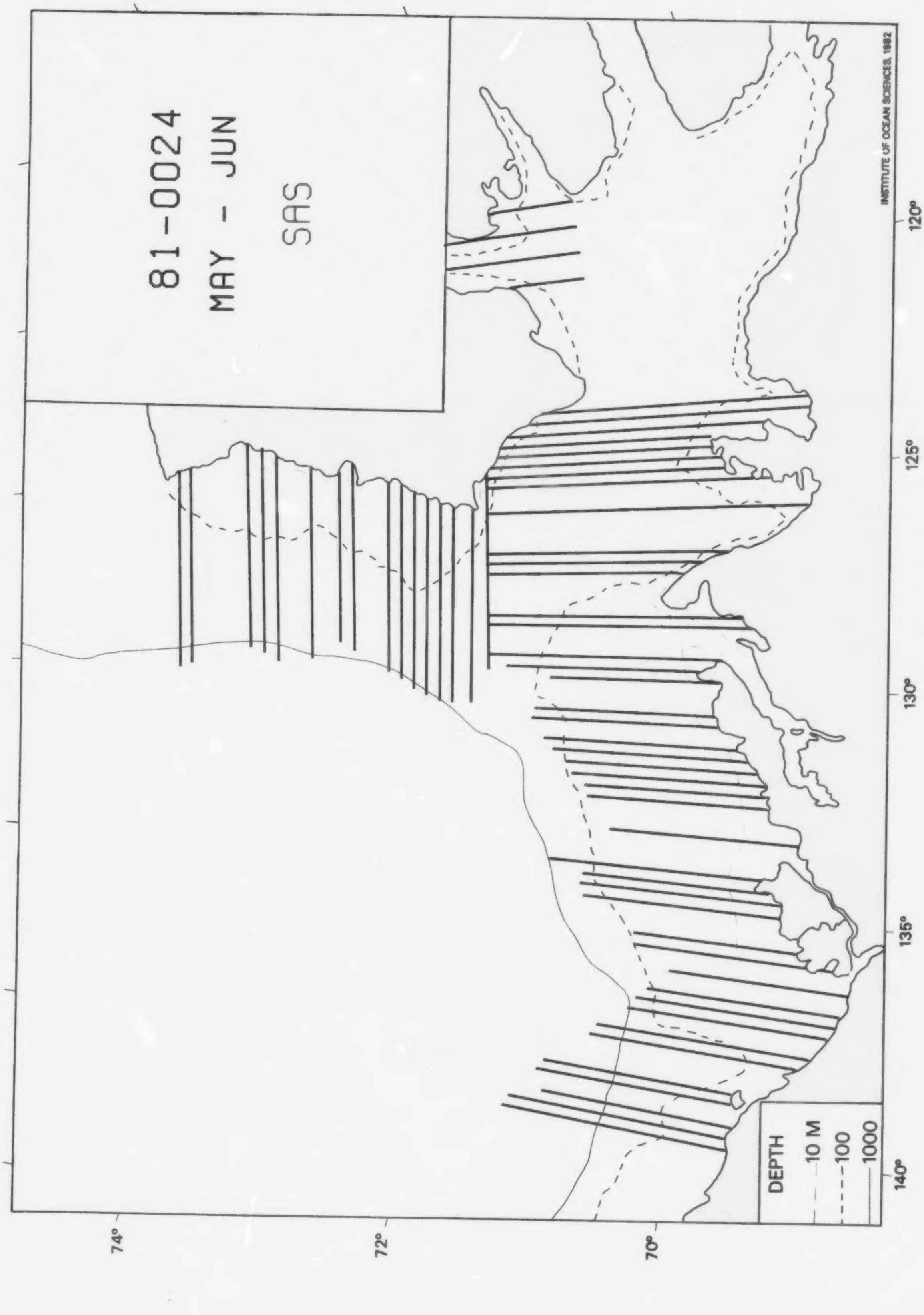
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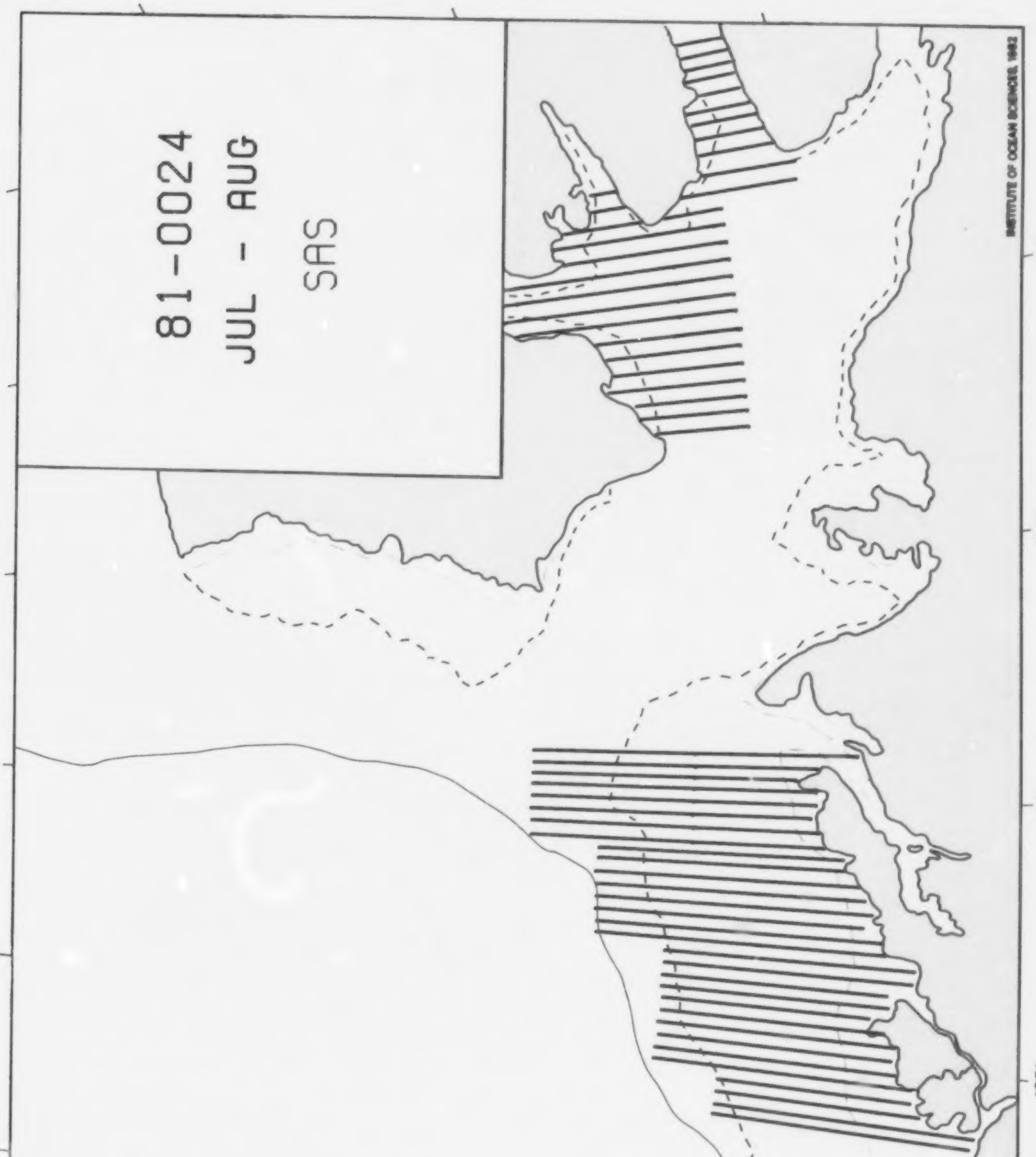
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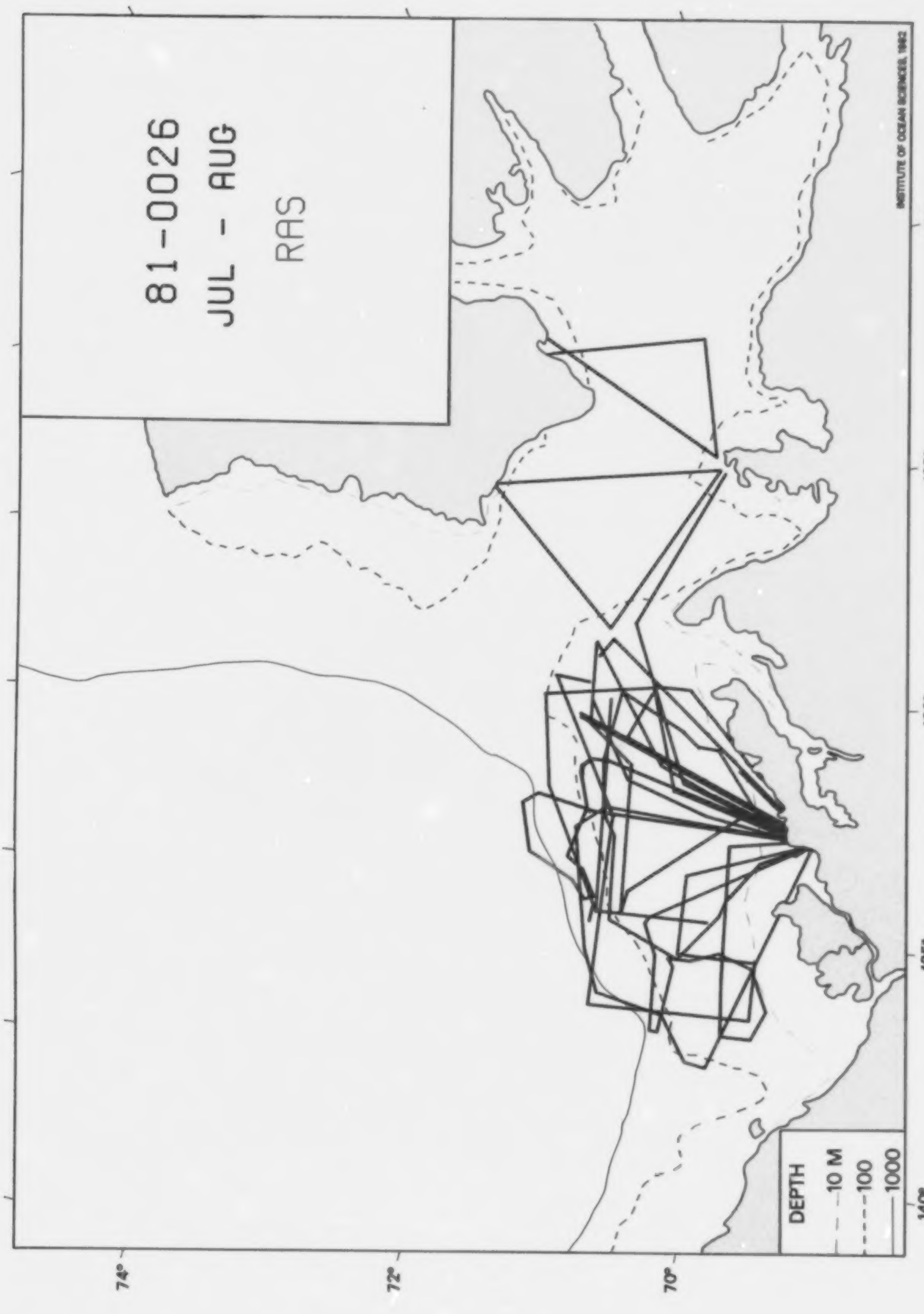
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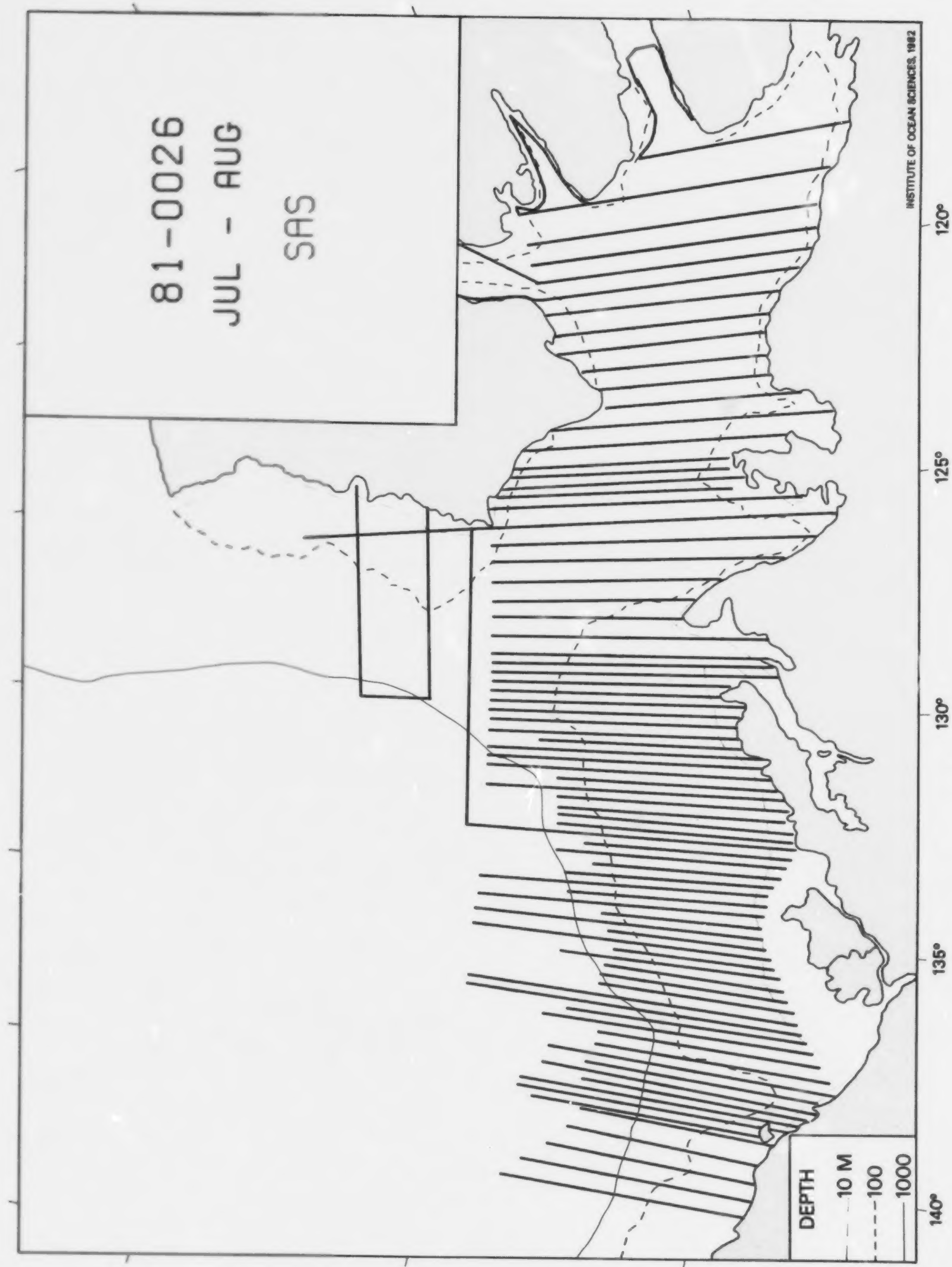
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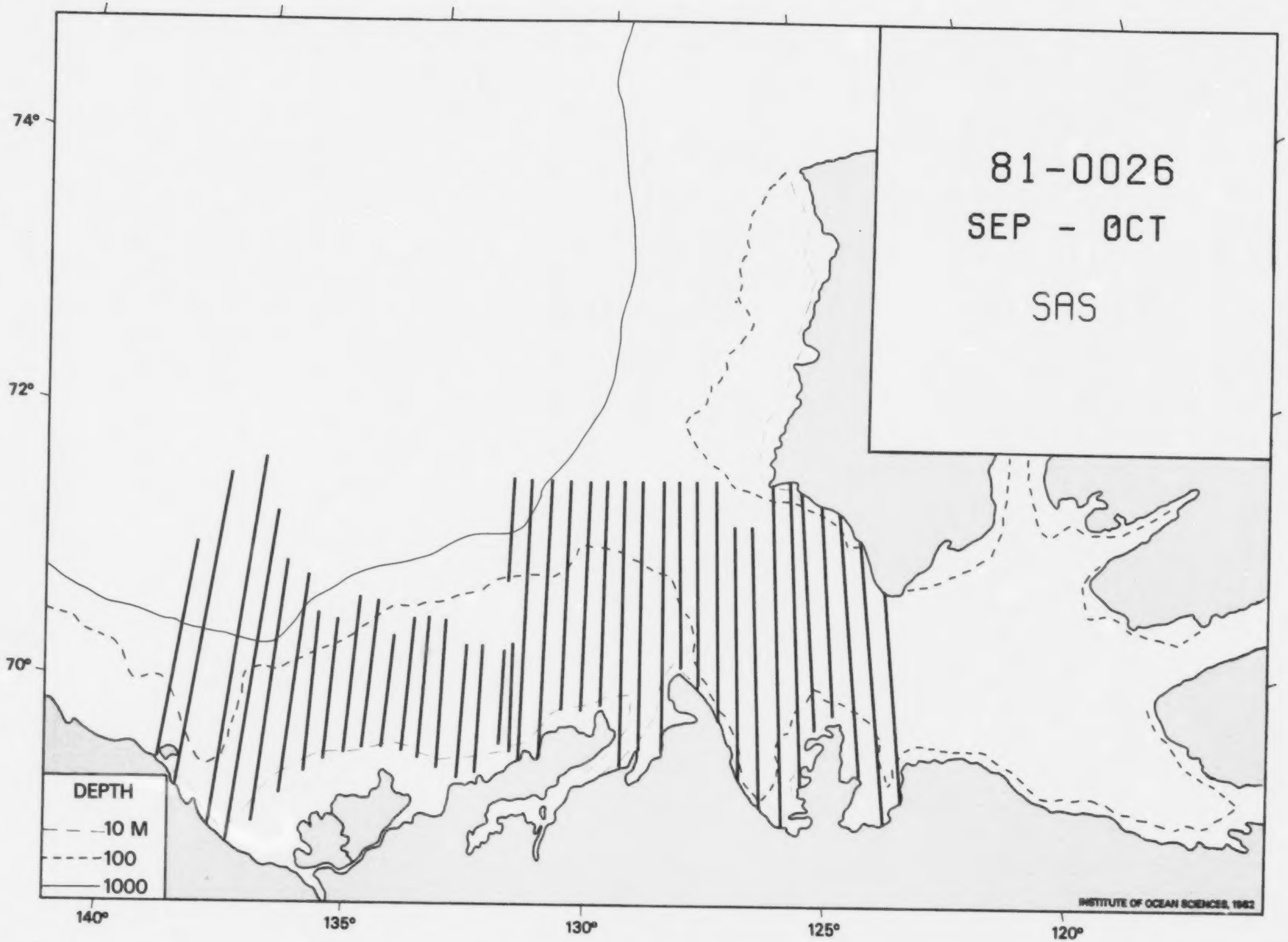
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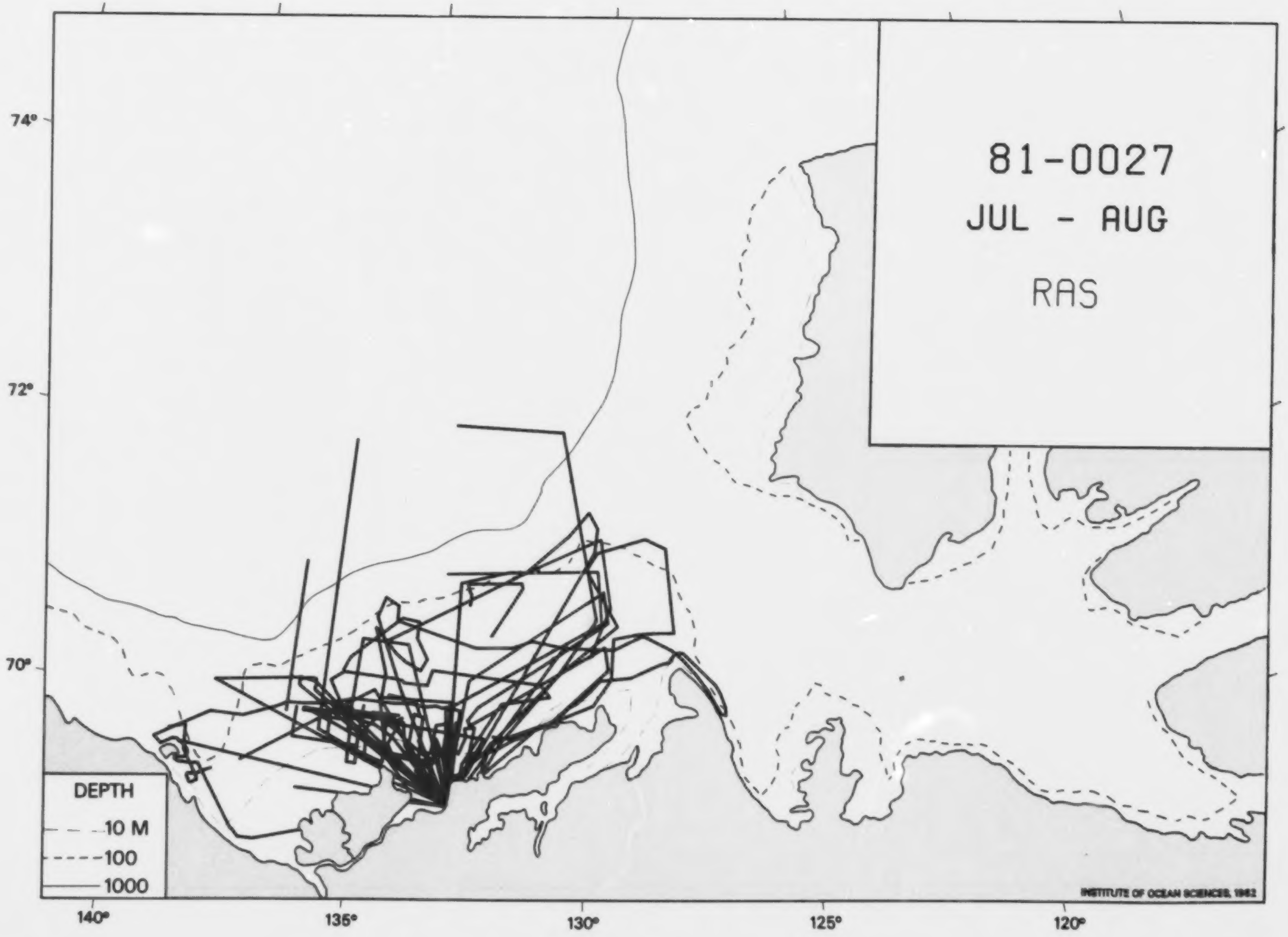
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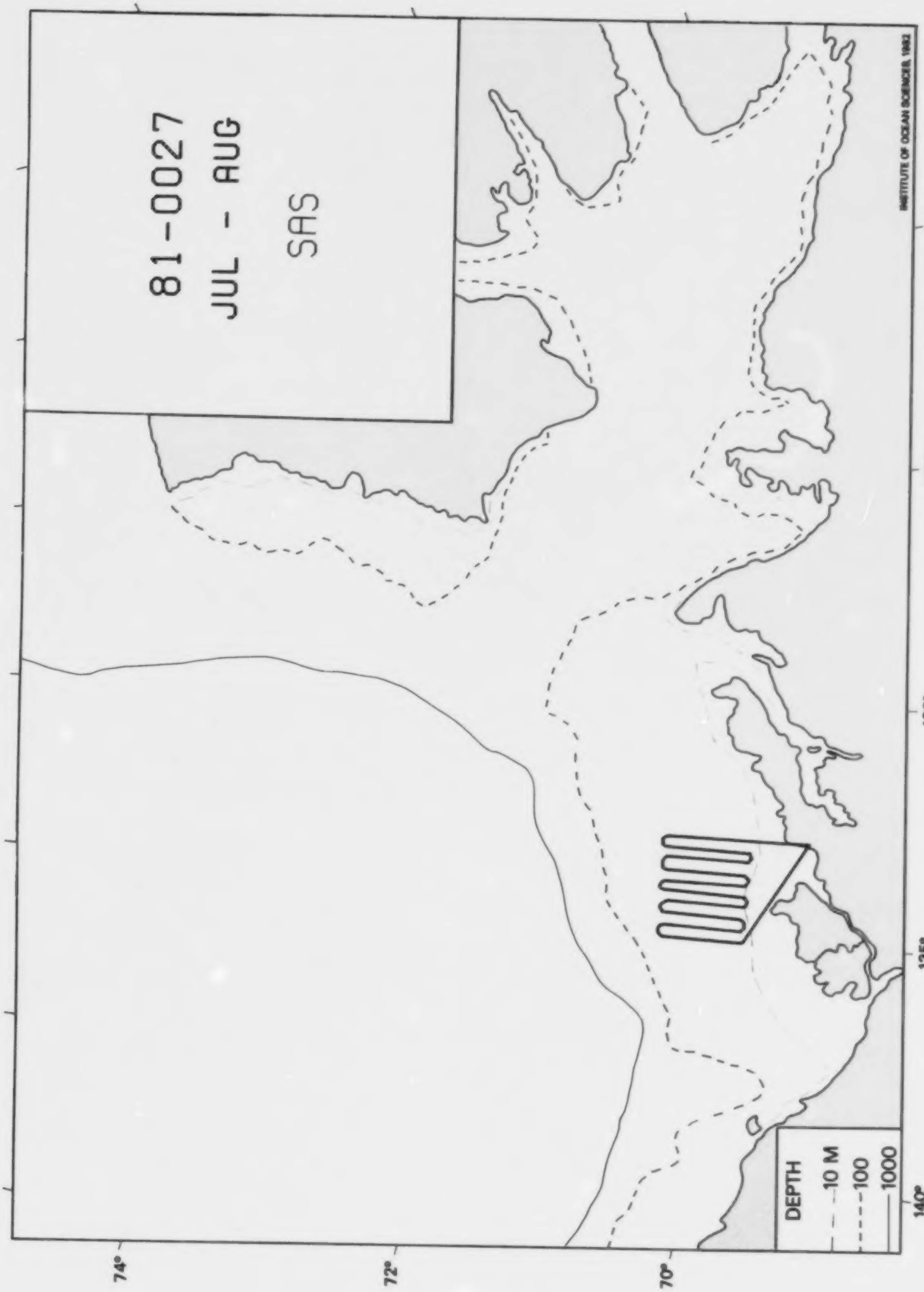
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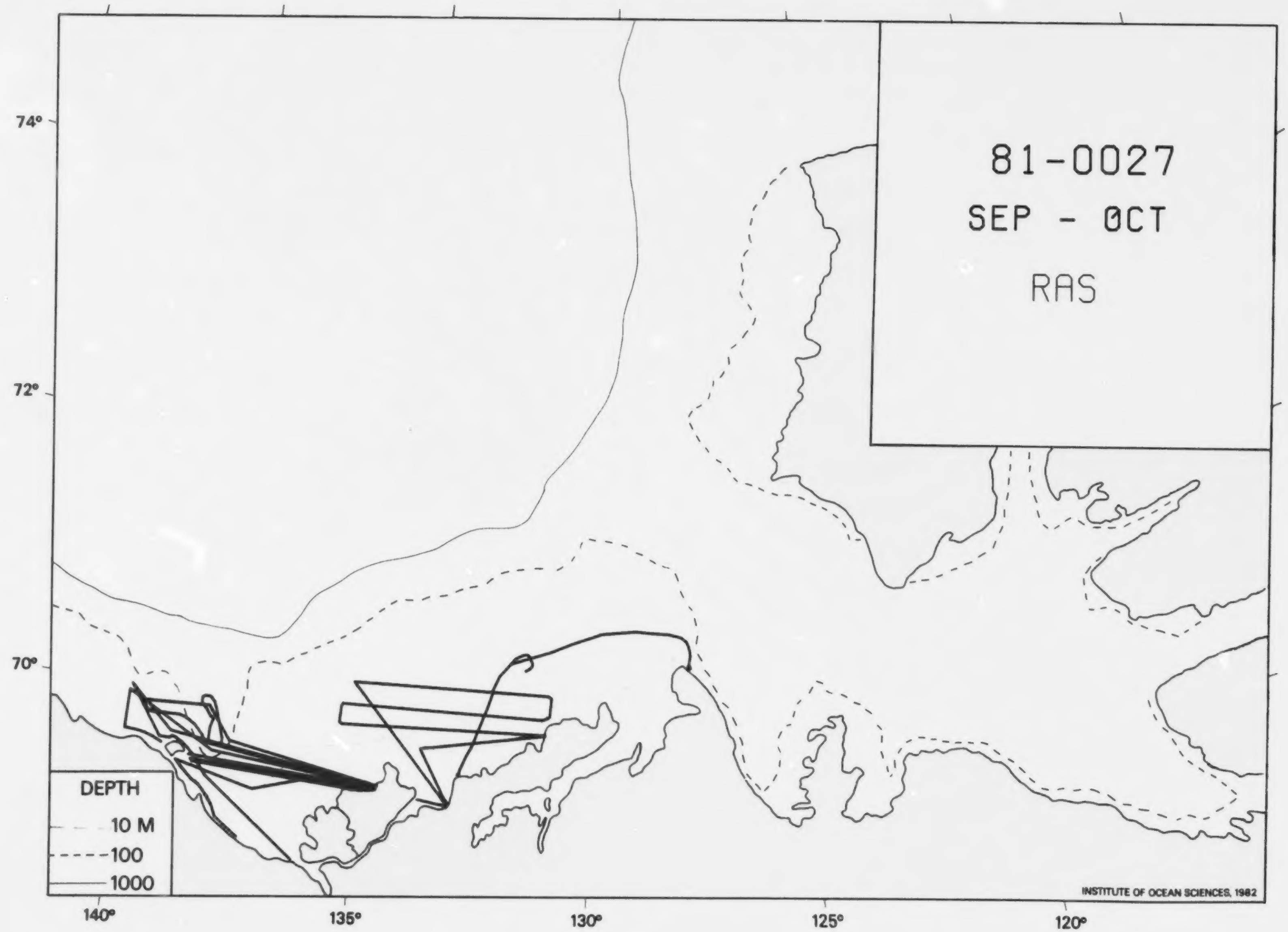
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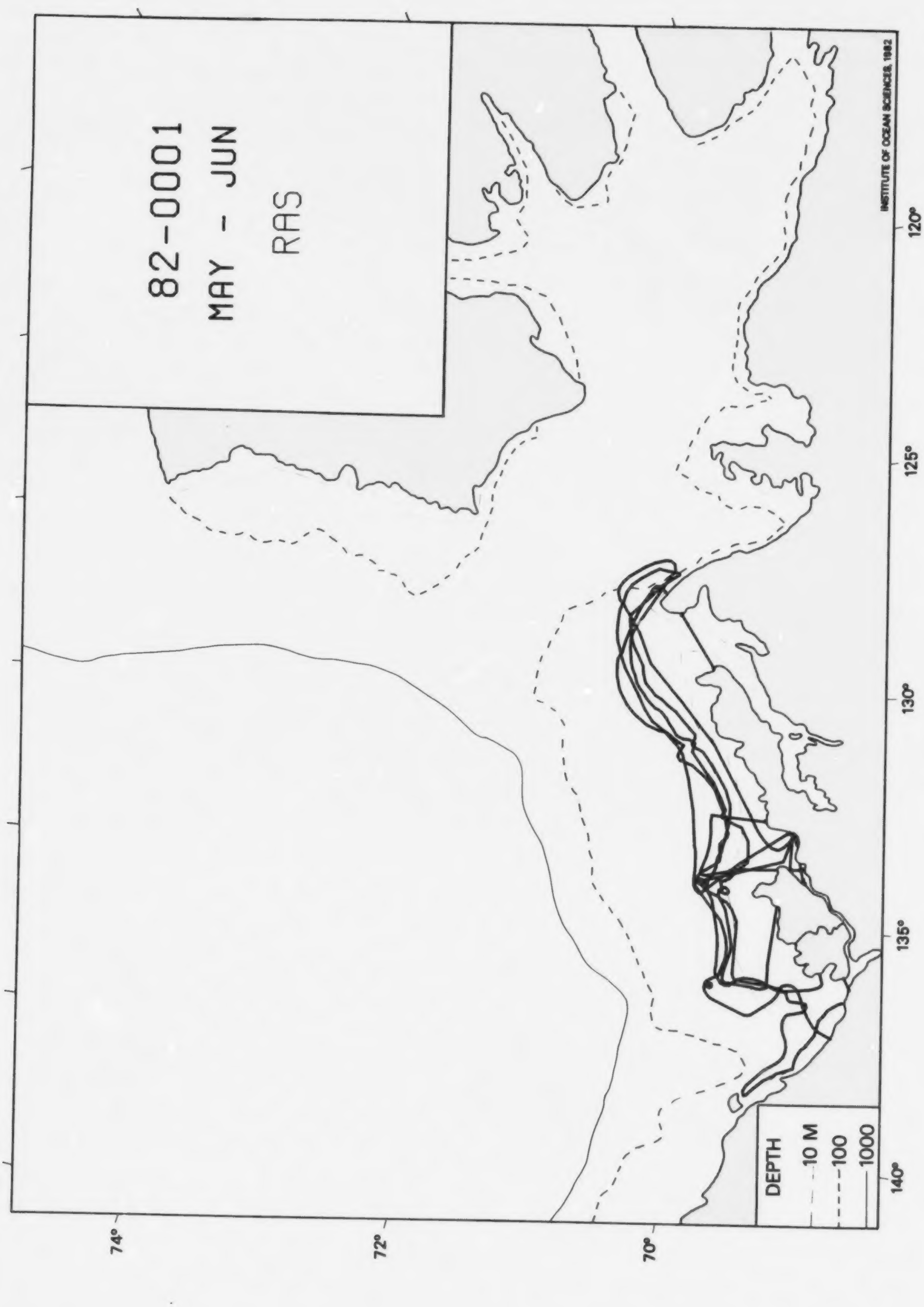
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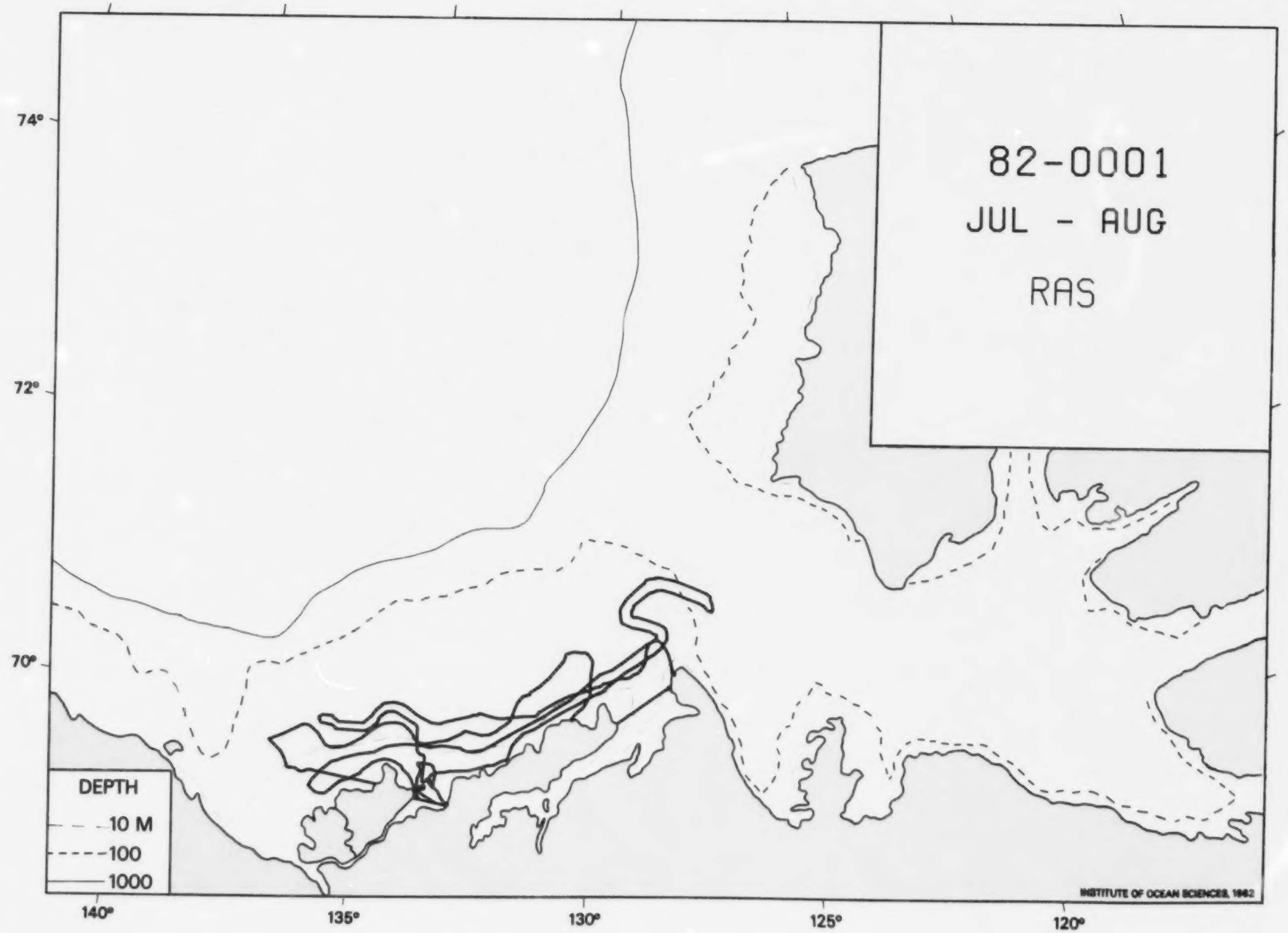
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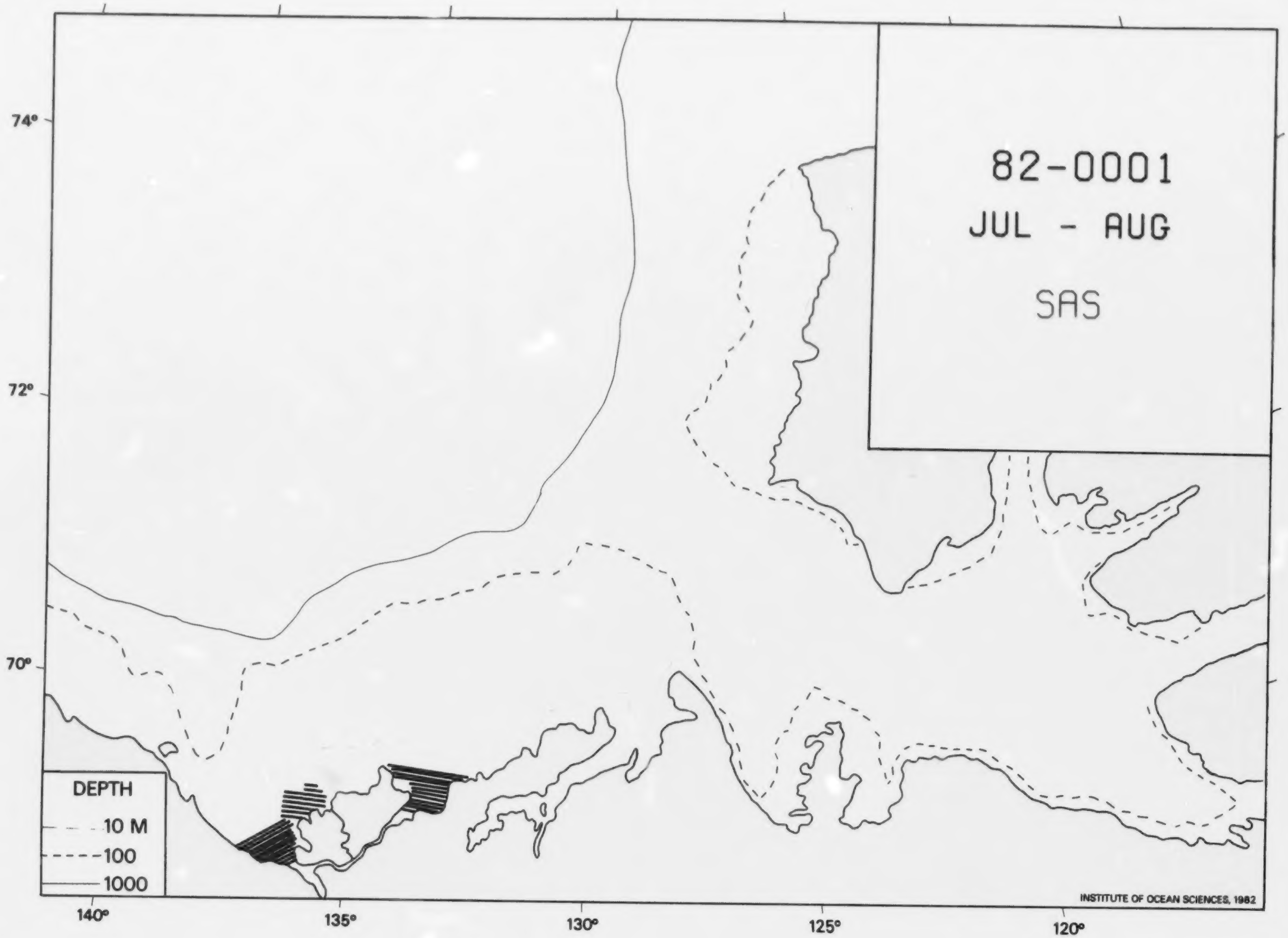
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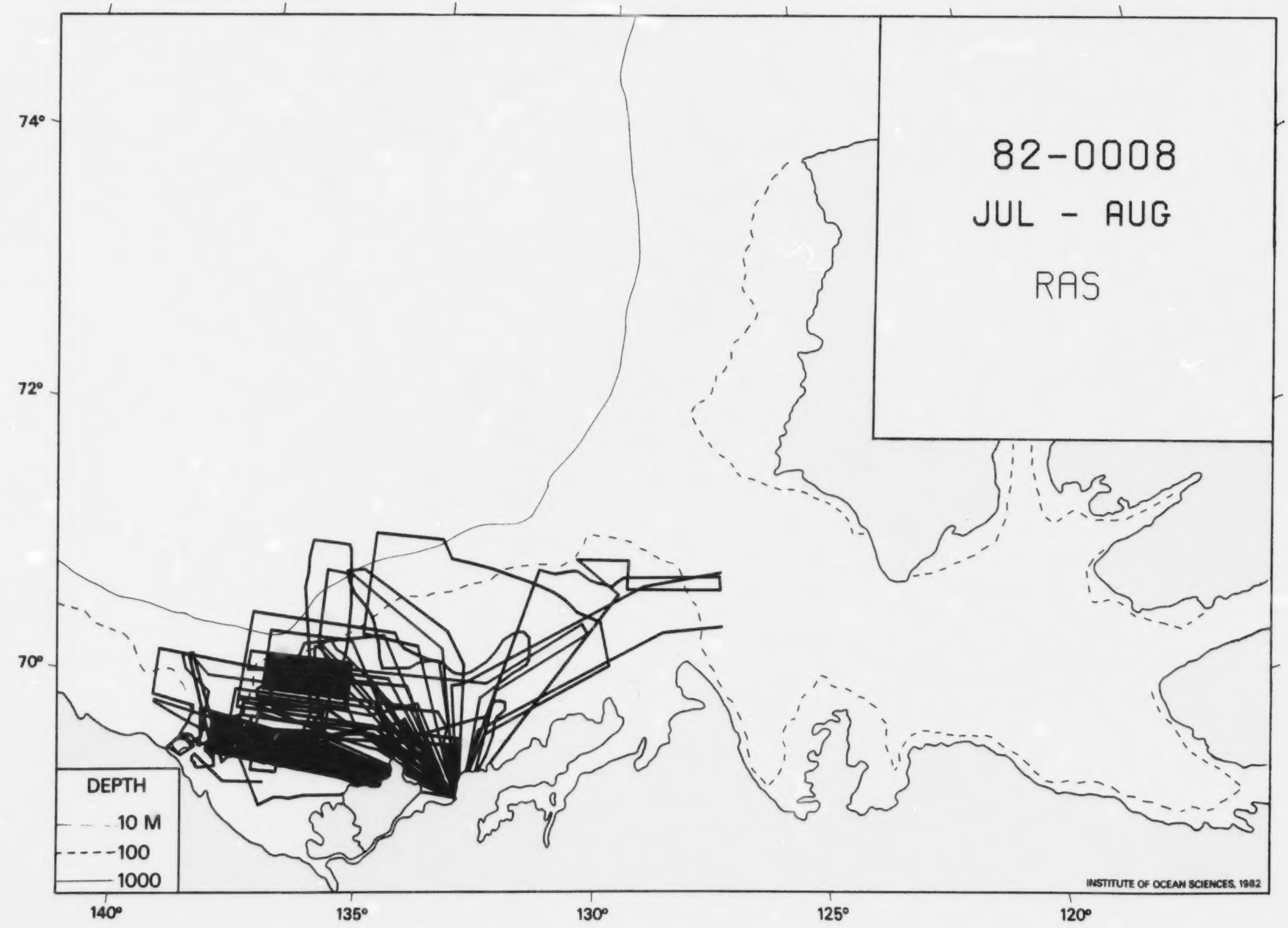
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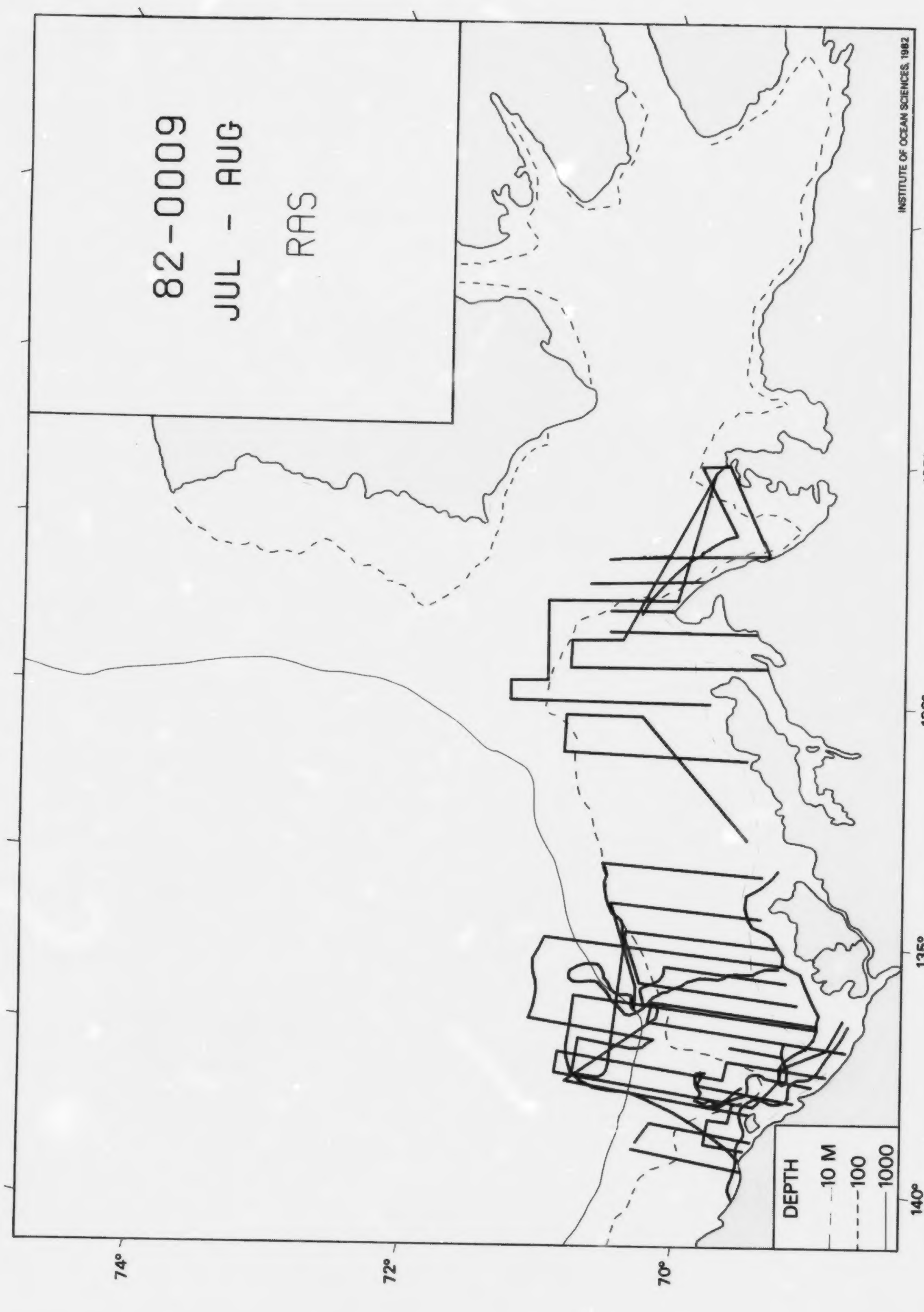
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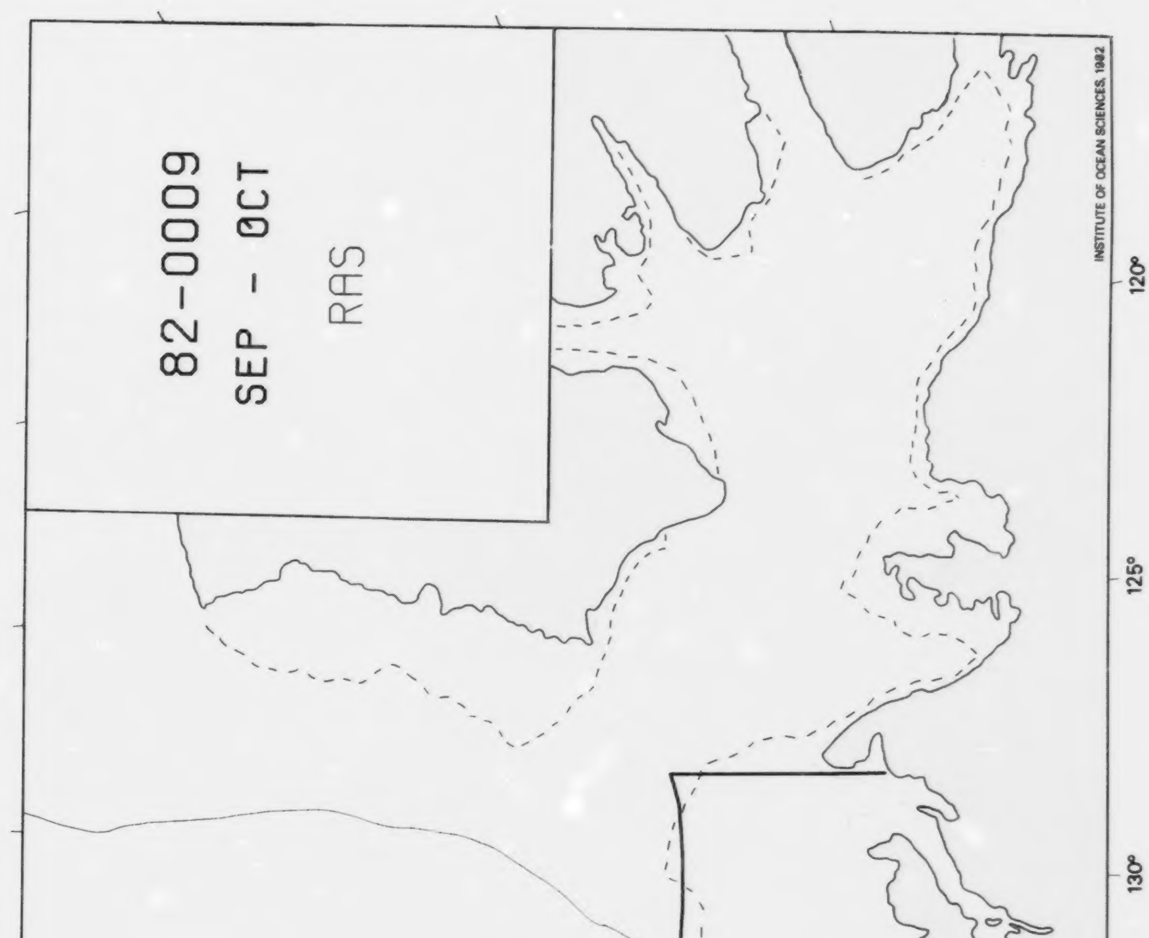
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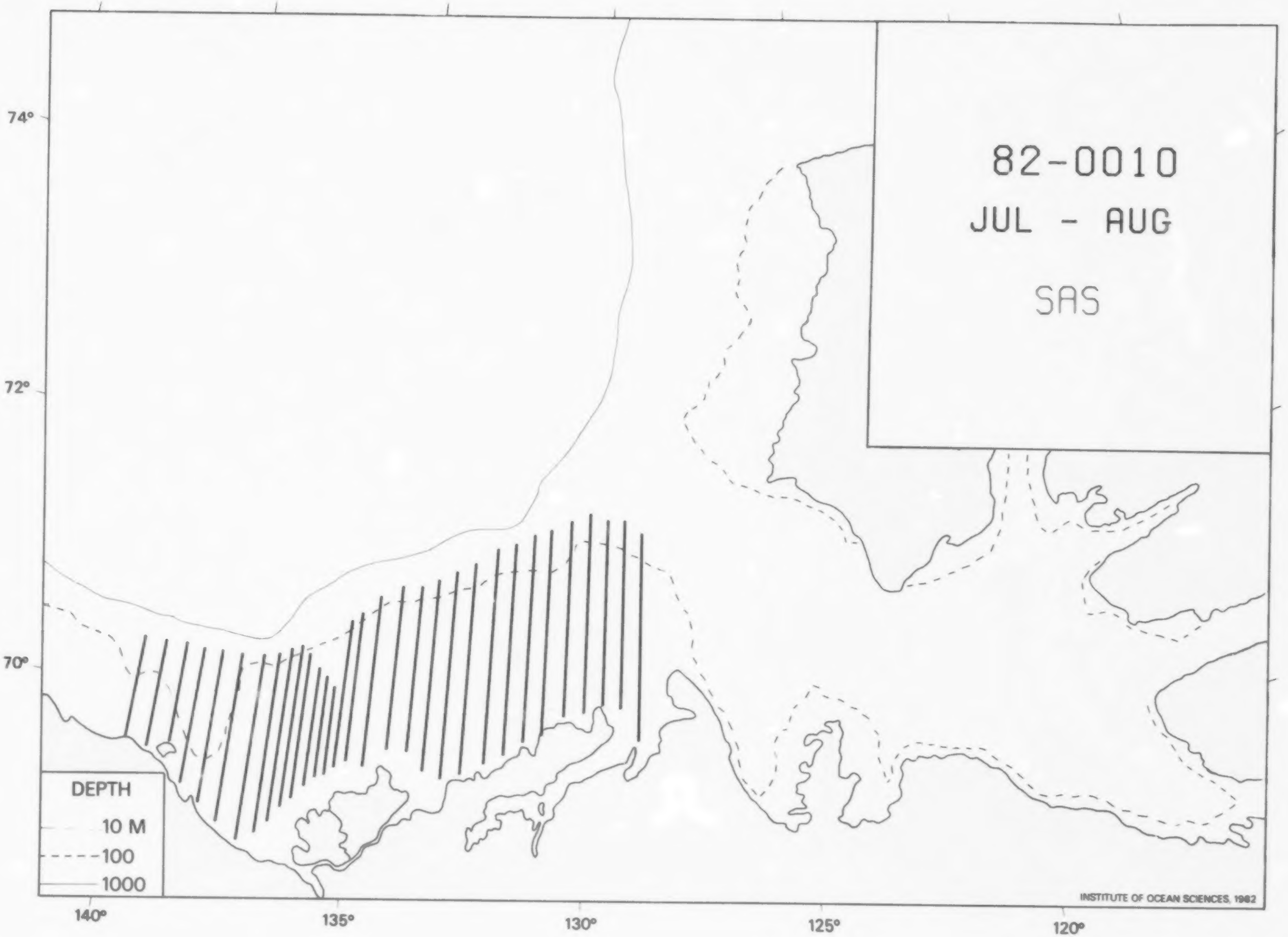
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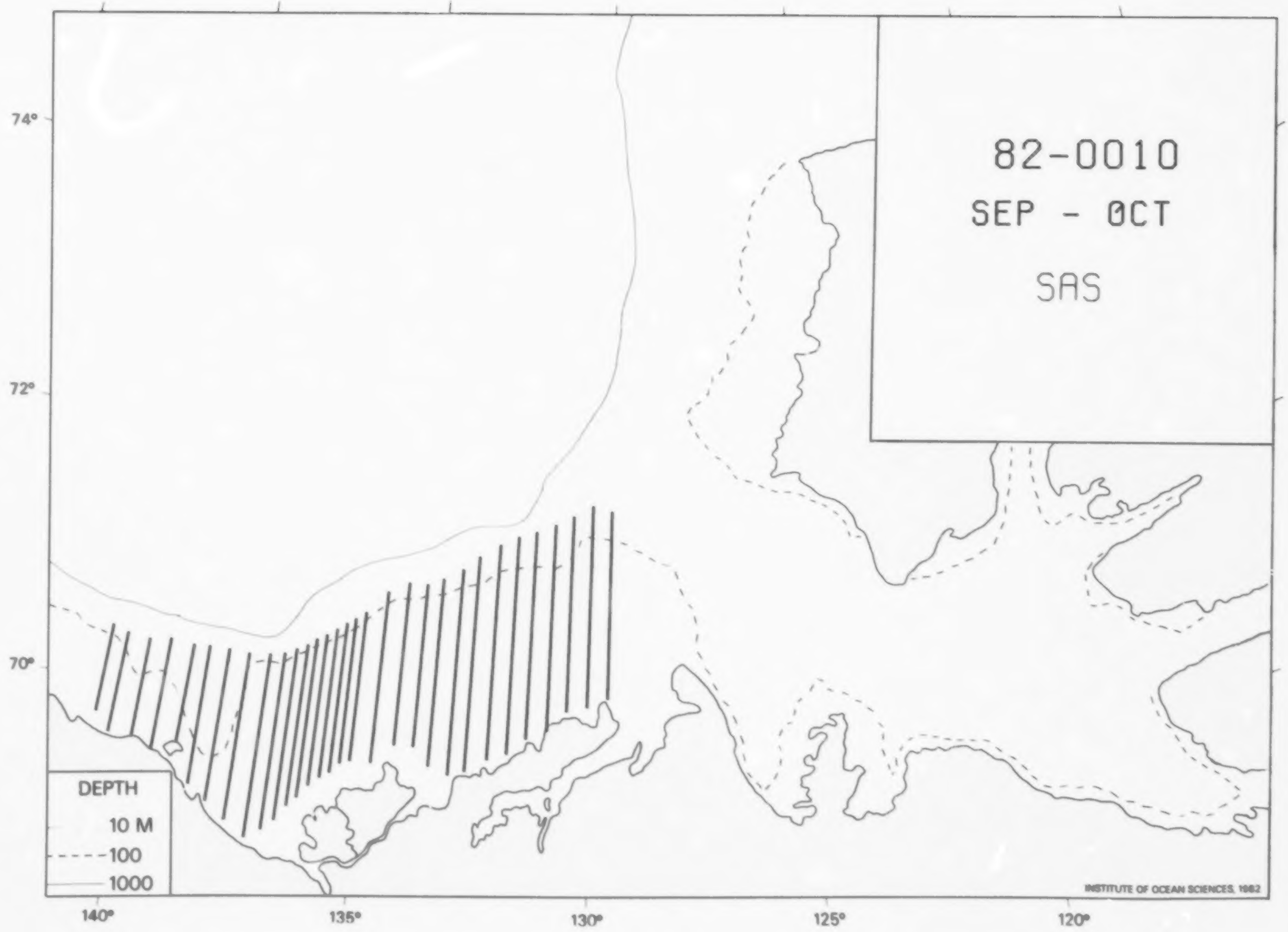
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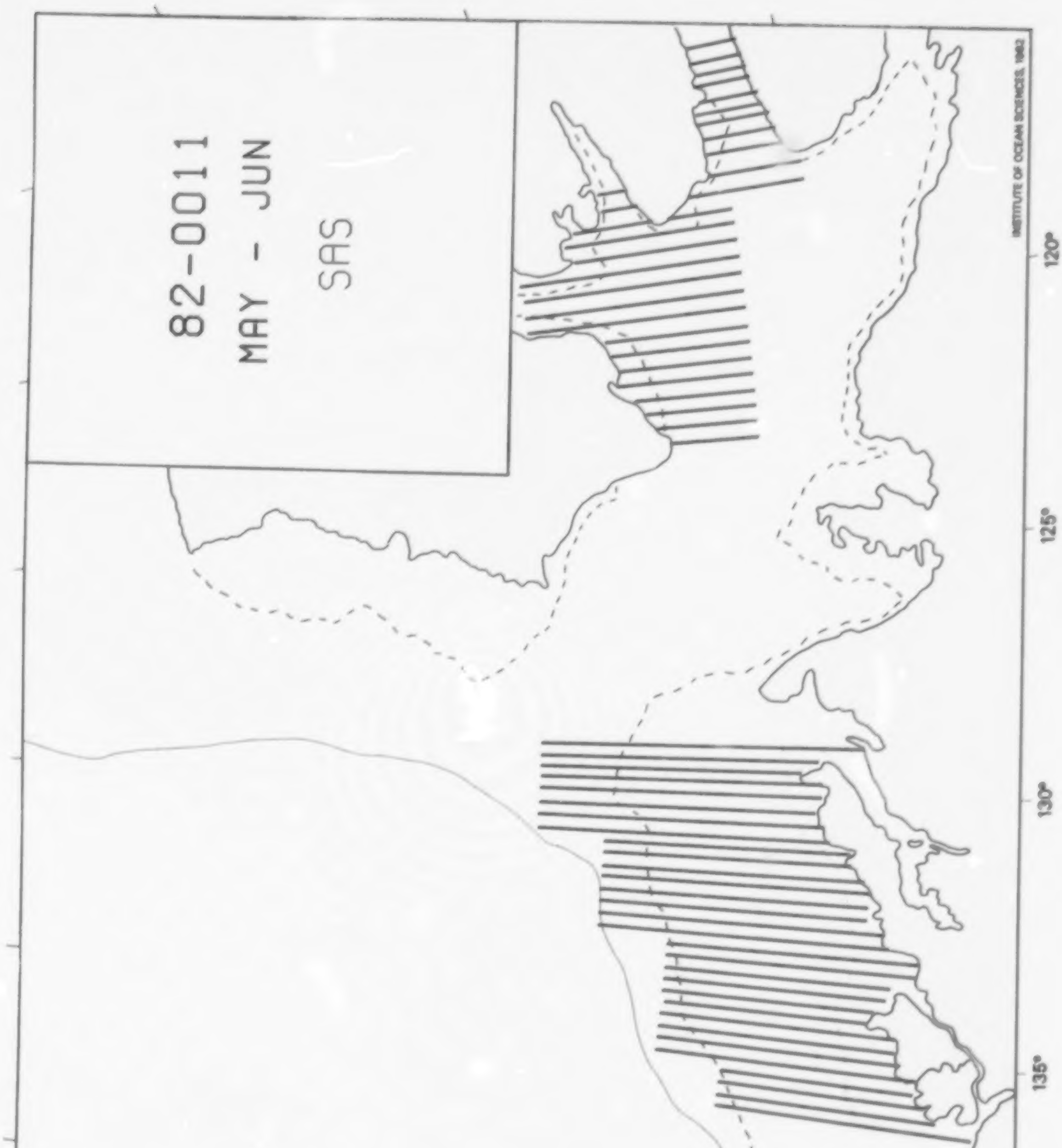
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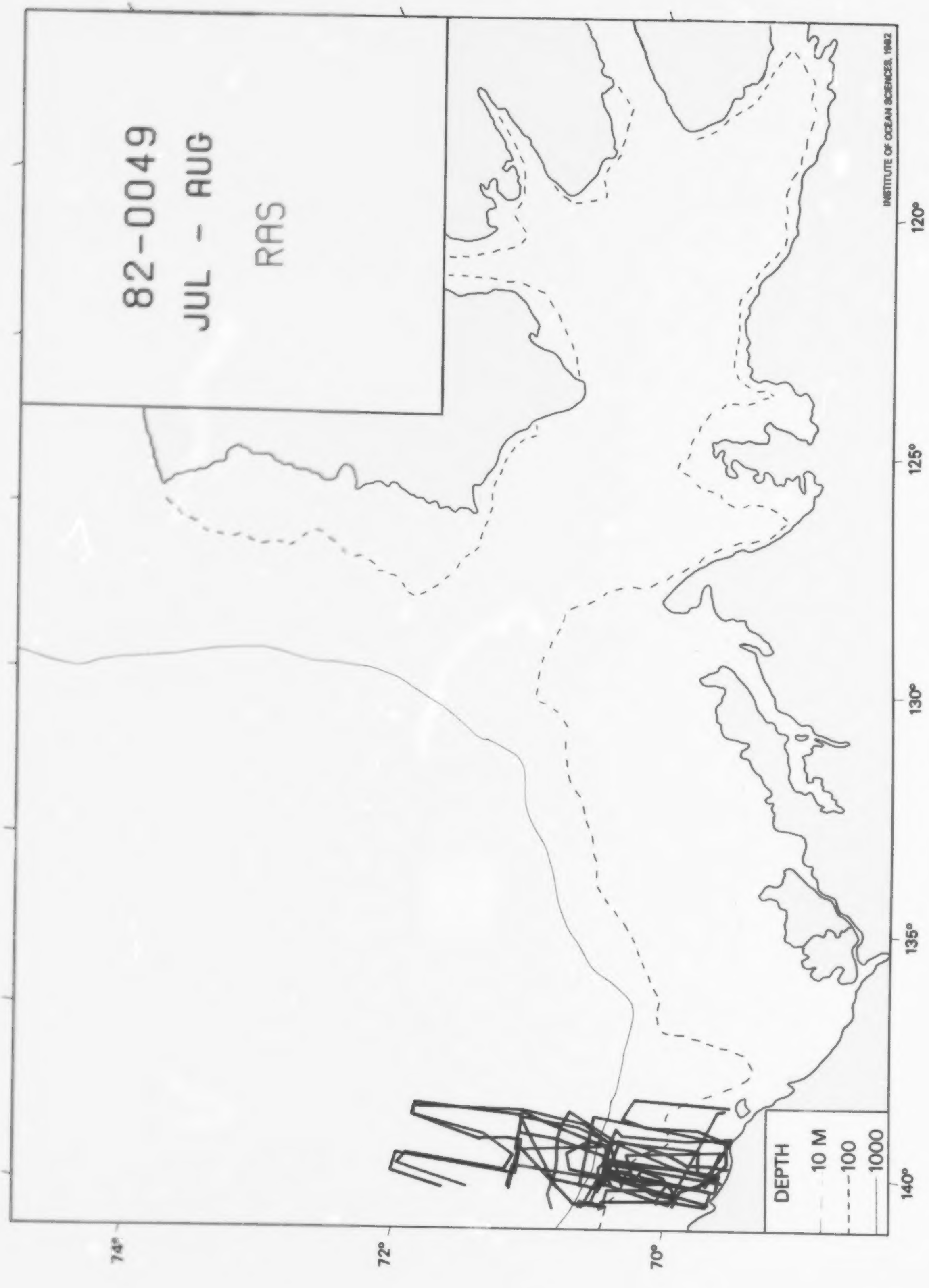
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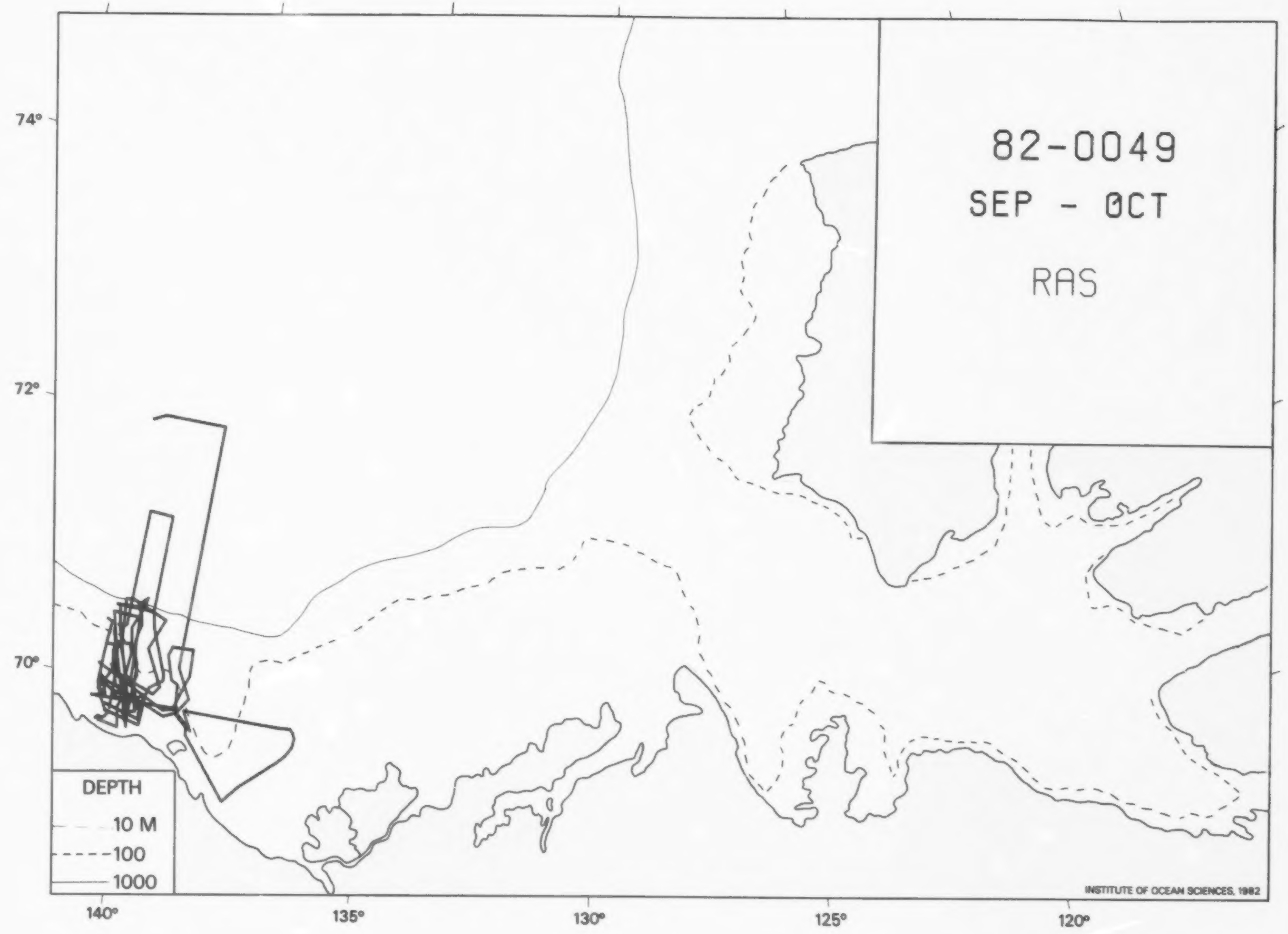
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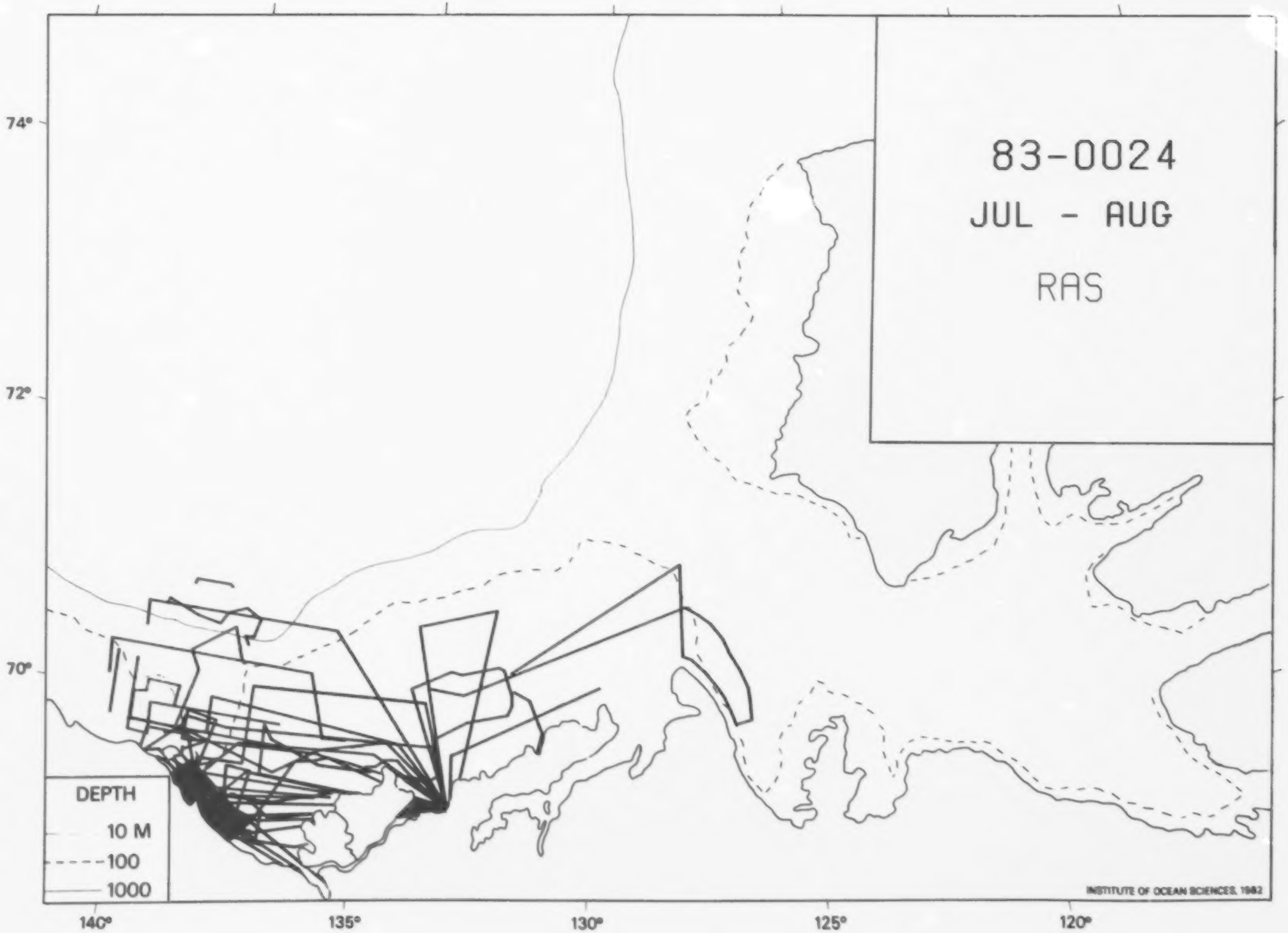
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JUL - AUG
RAS
74°
72°
70°
140°
135°
130°
125°
120°
DEPTH
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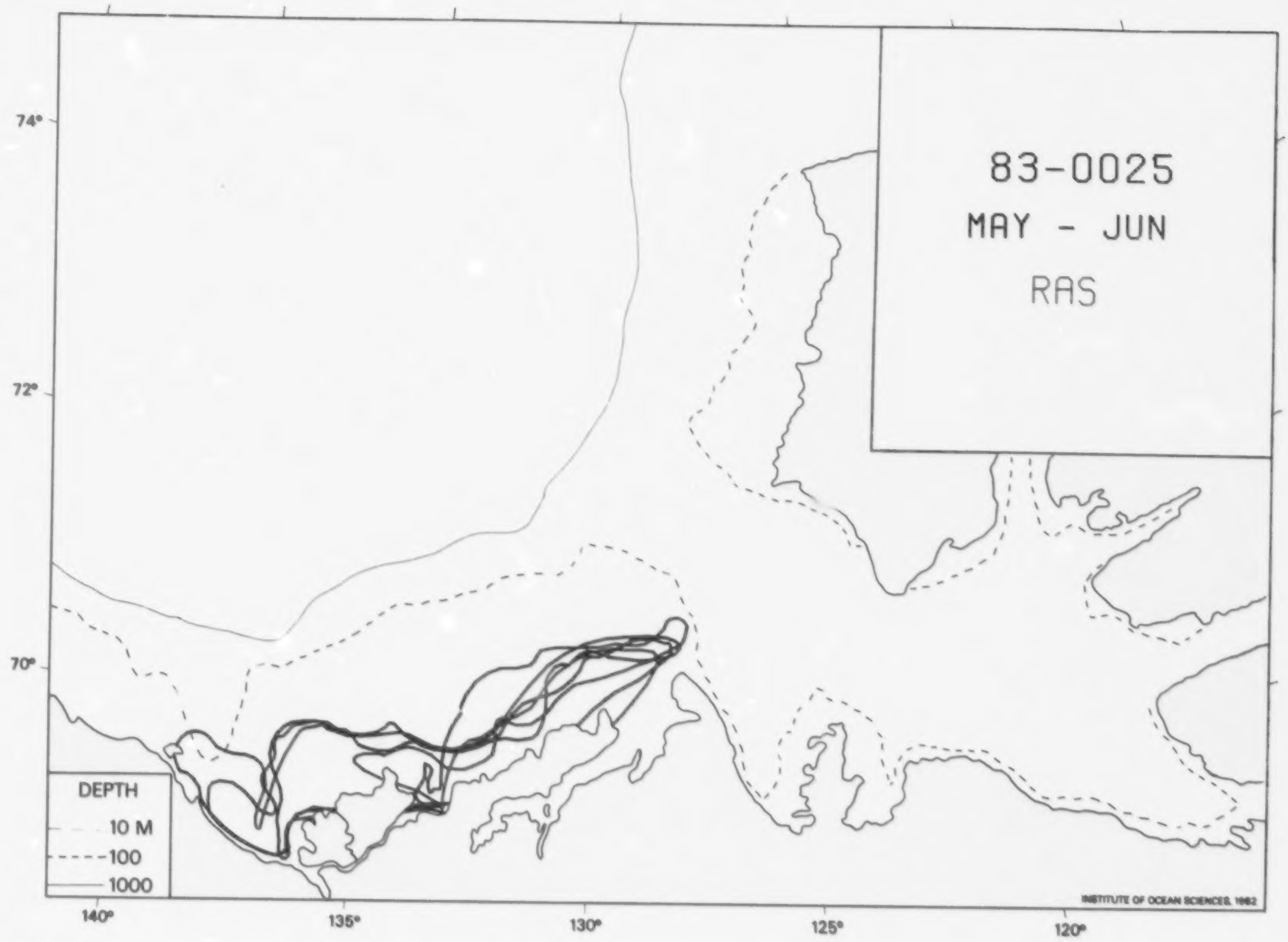
INSTITUTE OF OCEAN SCIENCES, 1982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MAY - JUN
RAS
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DEPTH
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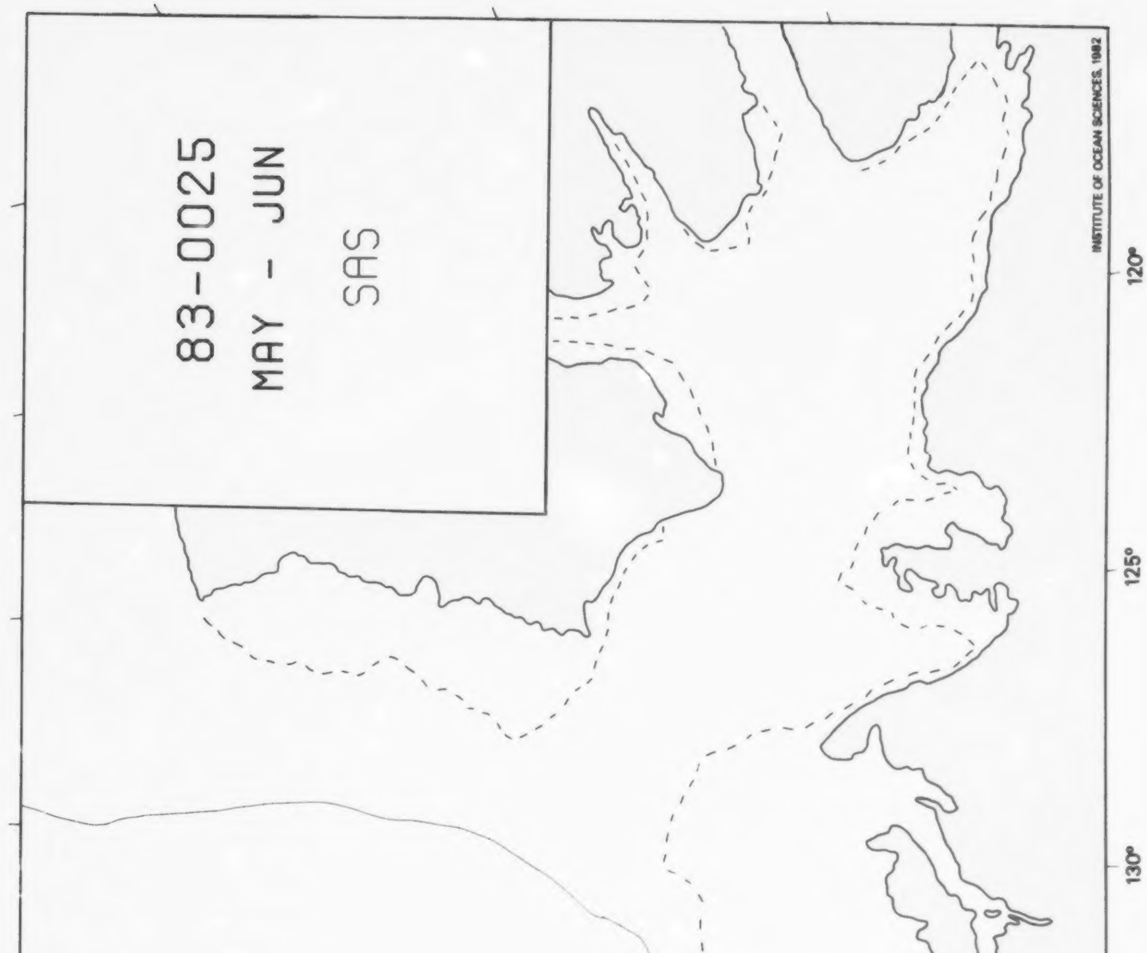
INSTITUTE OF OCEAN SCIENCES, 1982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MAY - JUN
SAS
INSTITUTE OF OCEAN SCIENCES, 1982
120°
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135°
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DEPTH
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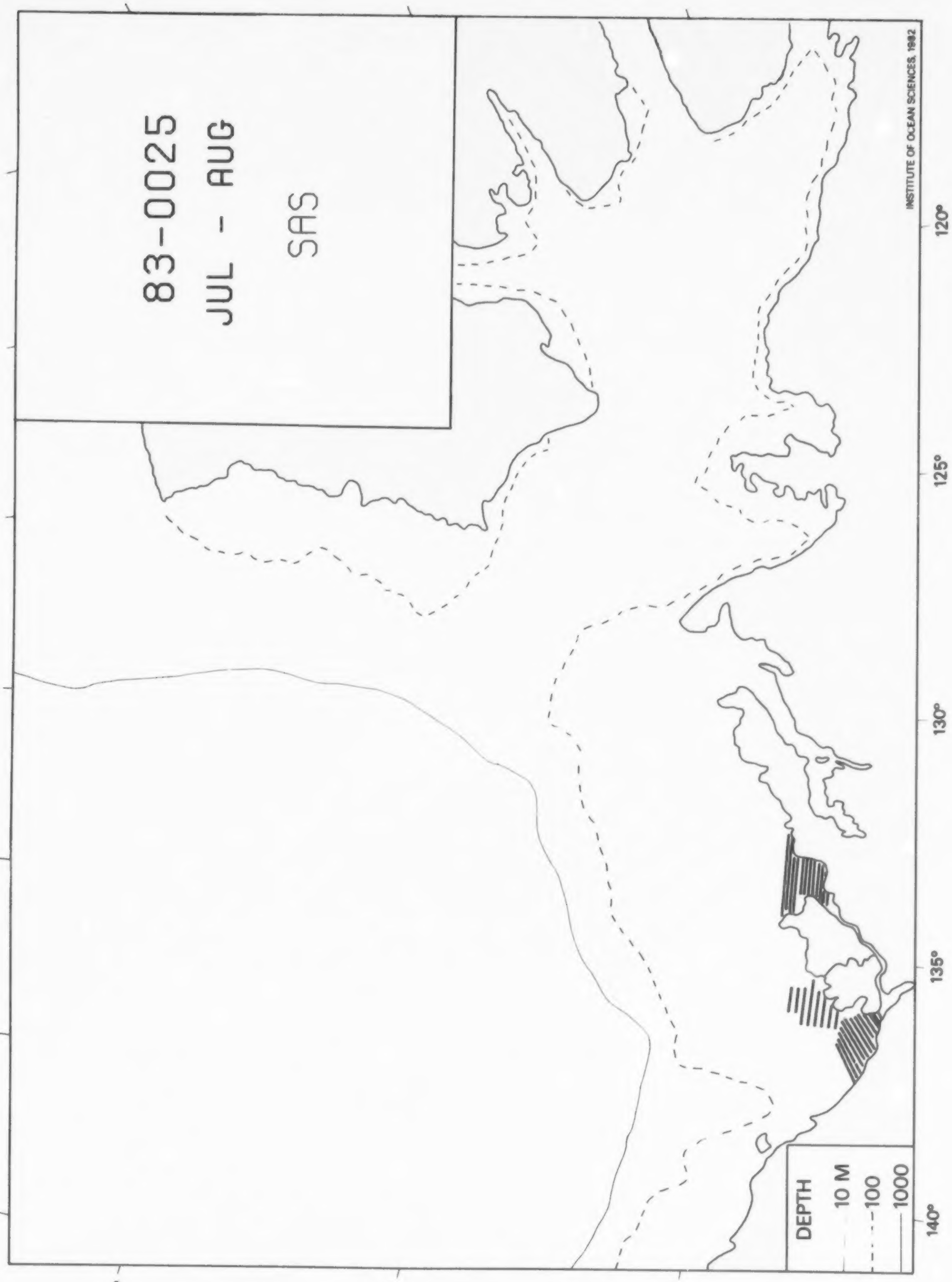
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SAS
DEPTH
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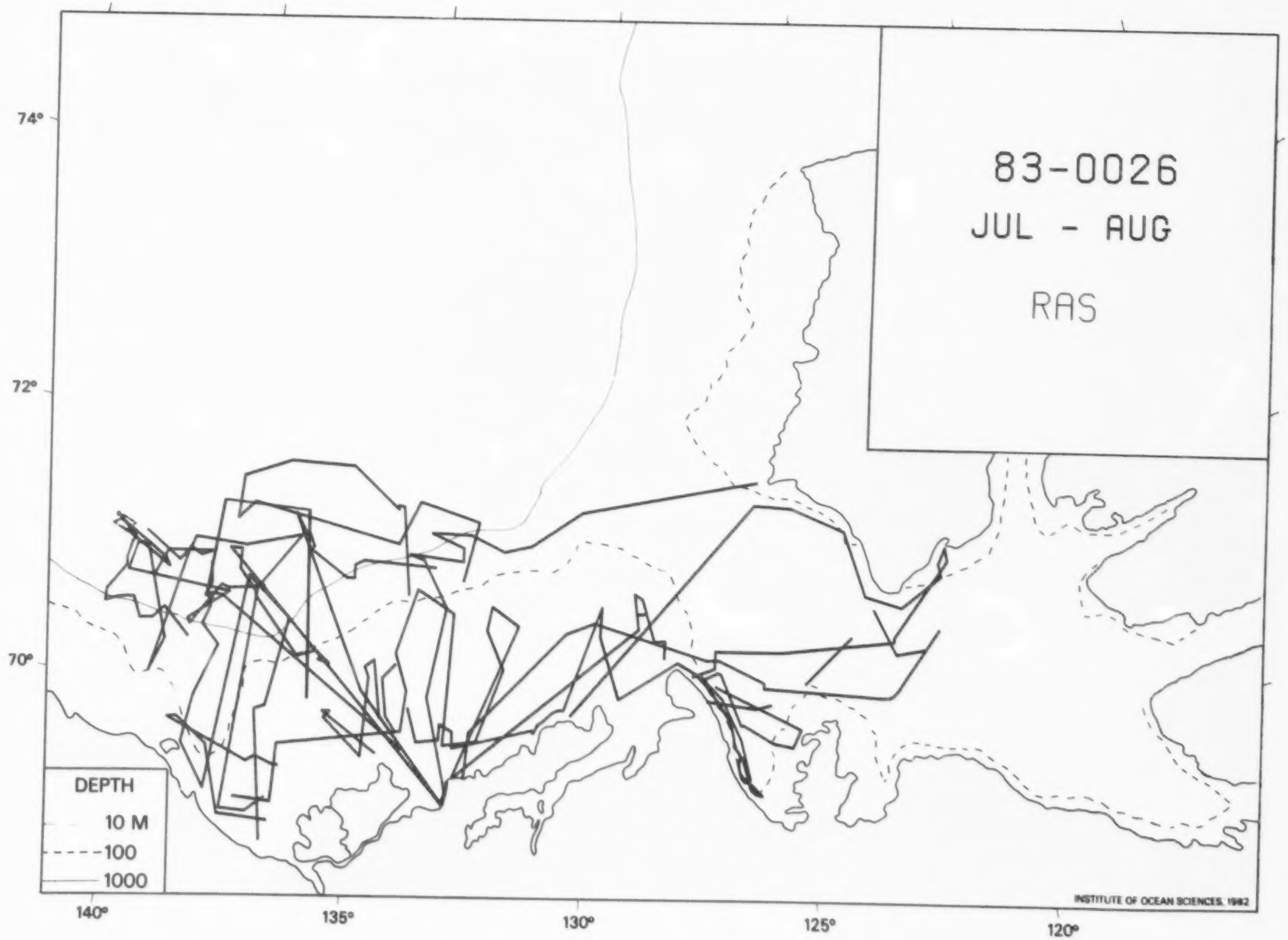
INSTITUTE OF OCEAN SCIENCES, 1982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JUL - AUG
RAS
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140°
135°
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125°
120°
DEPTH
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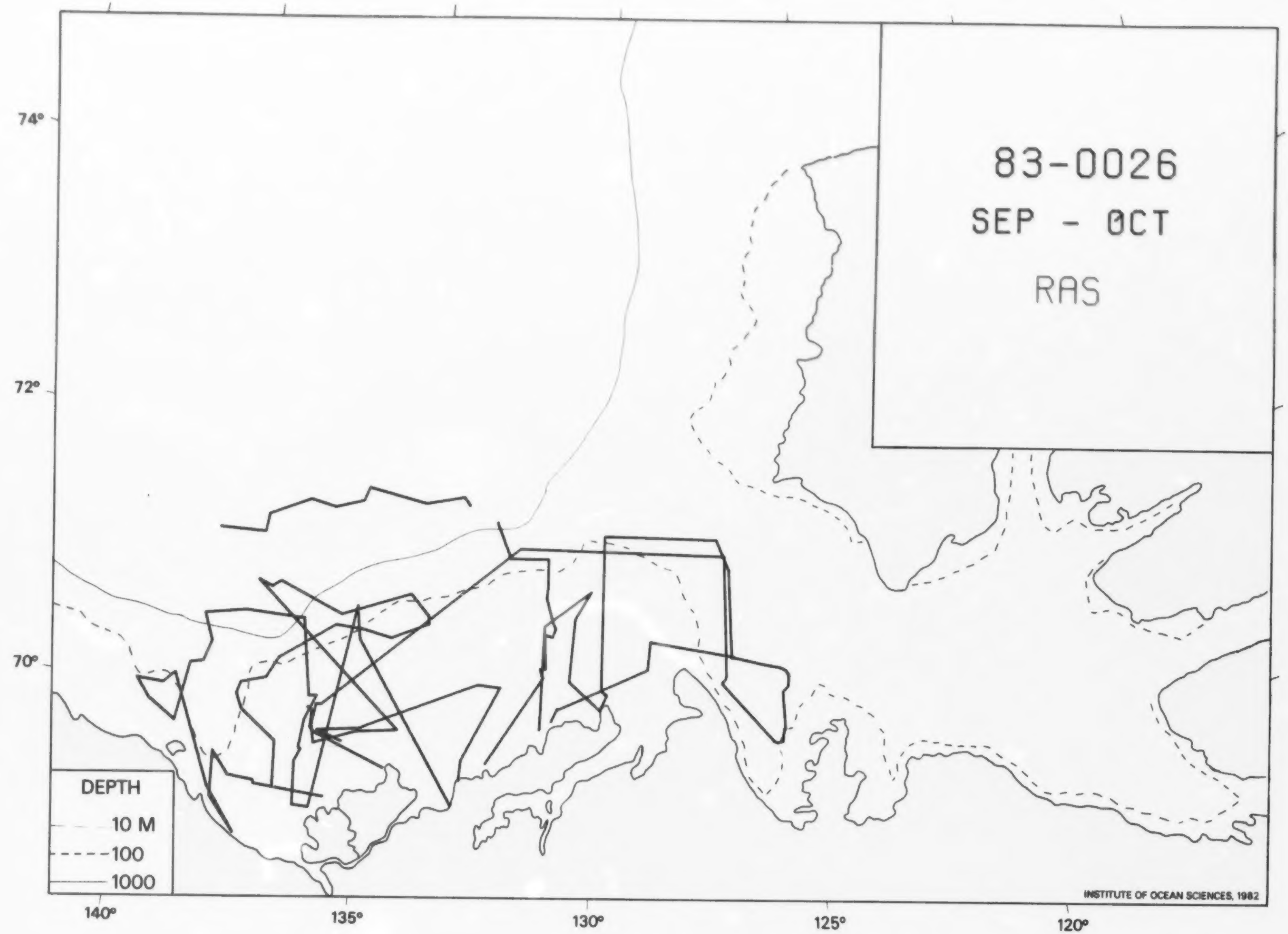
INSTITUTE OF OCEAN SCIENCES, 1982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SEP - 0CT
RAS
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120°
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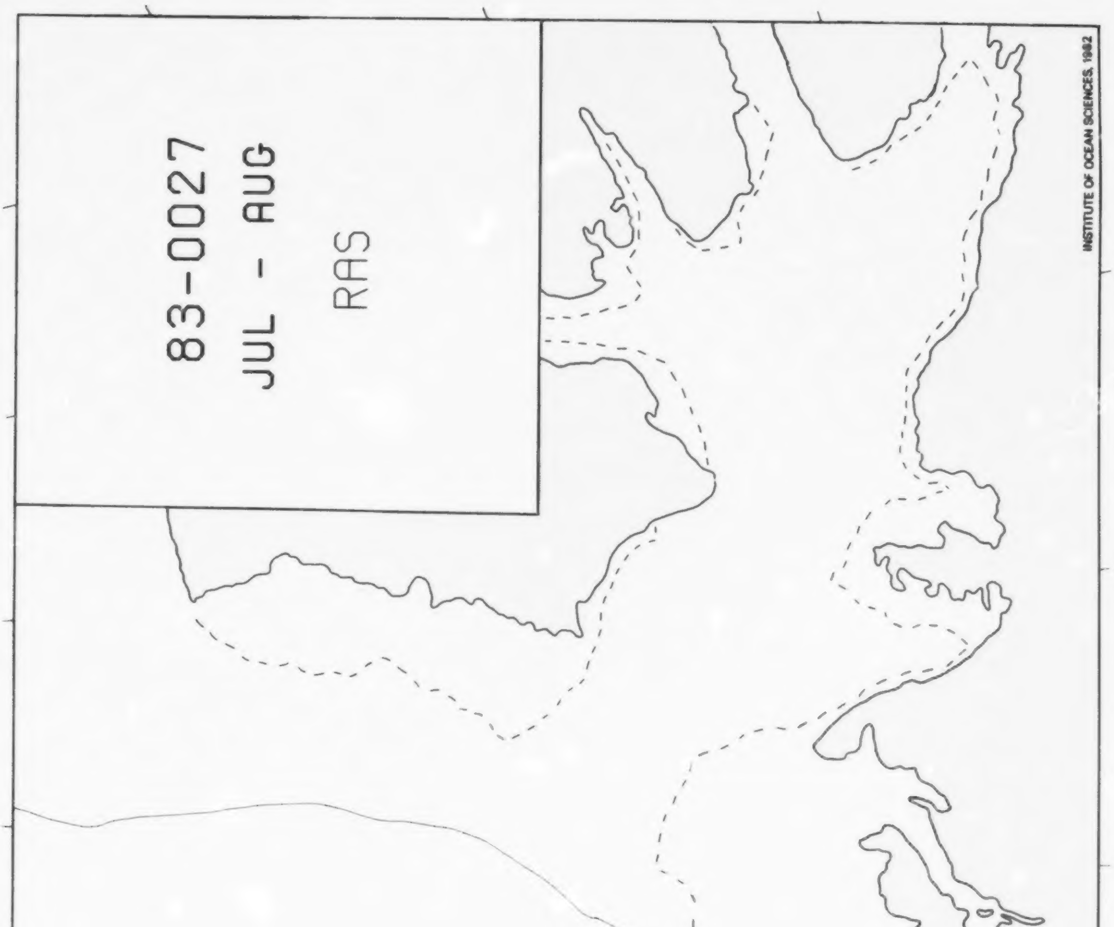
INSTITUTE OF OCEAN SCIENCES, 1982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JUL - AUG
RAS
INSTITUTE OF OCEAN SCIENCES, 1982
120°
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72°
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DEPTH
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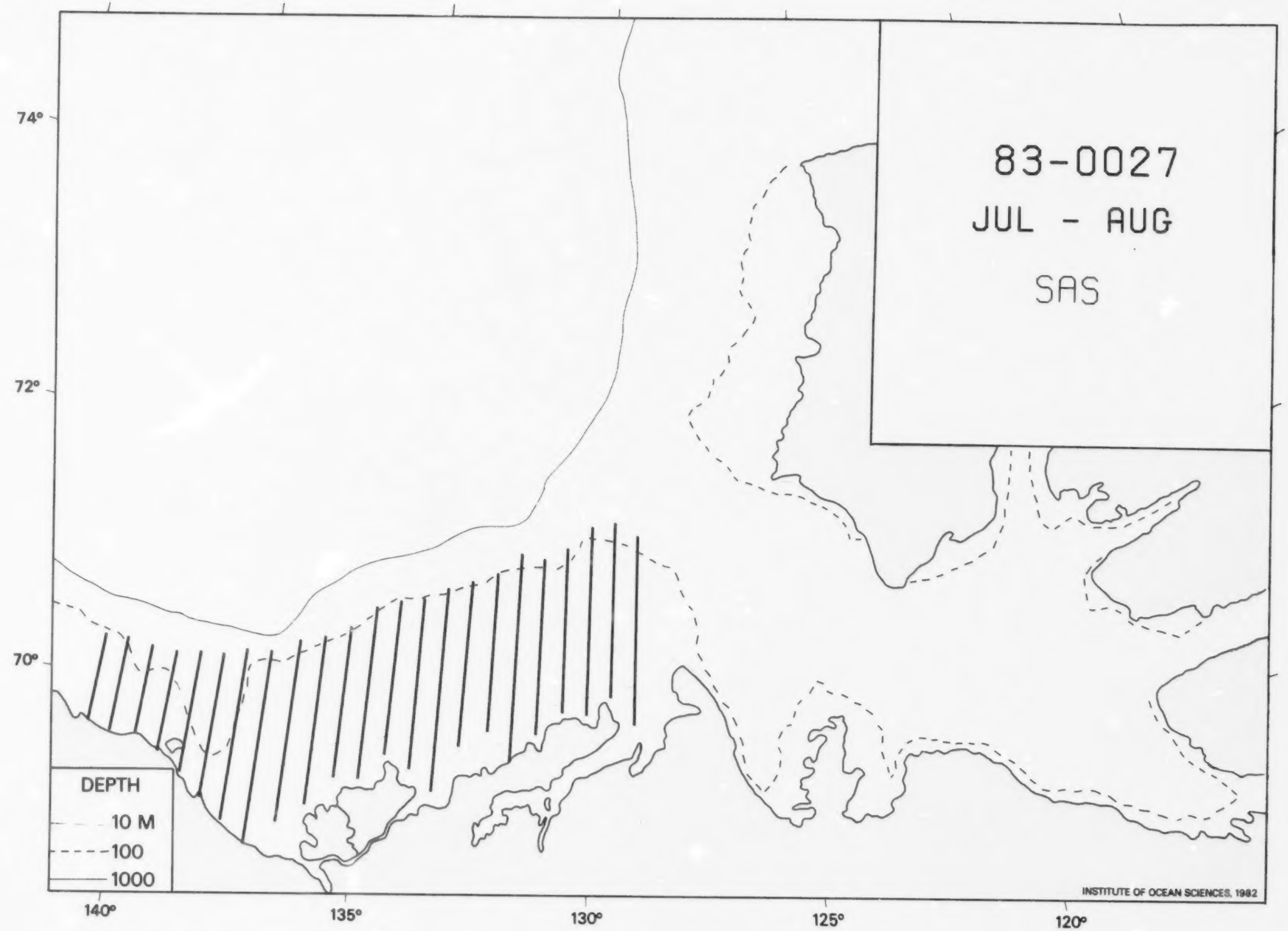
100
1000


83-0027
JUL - AUG
SAS
74°
72°
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140°
135°
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125°
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DEPTH
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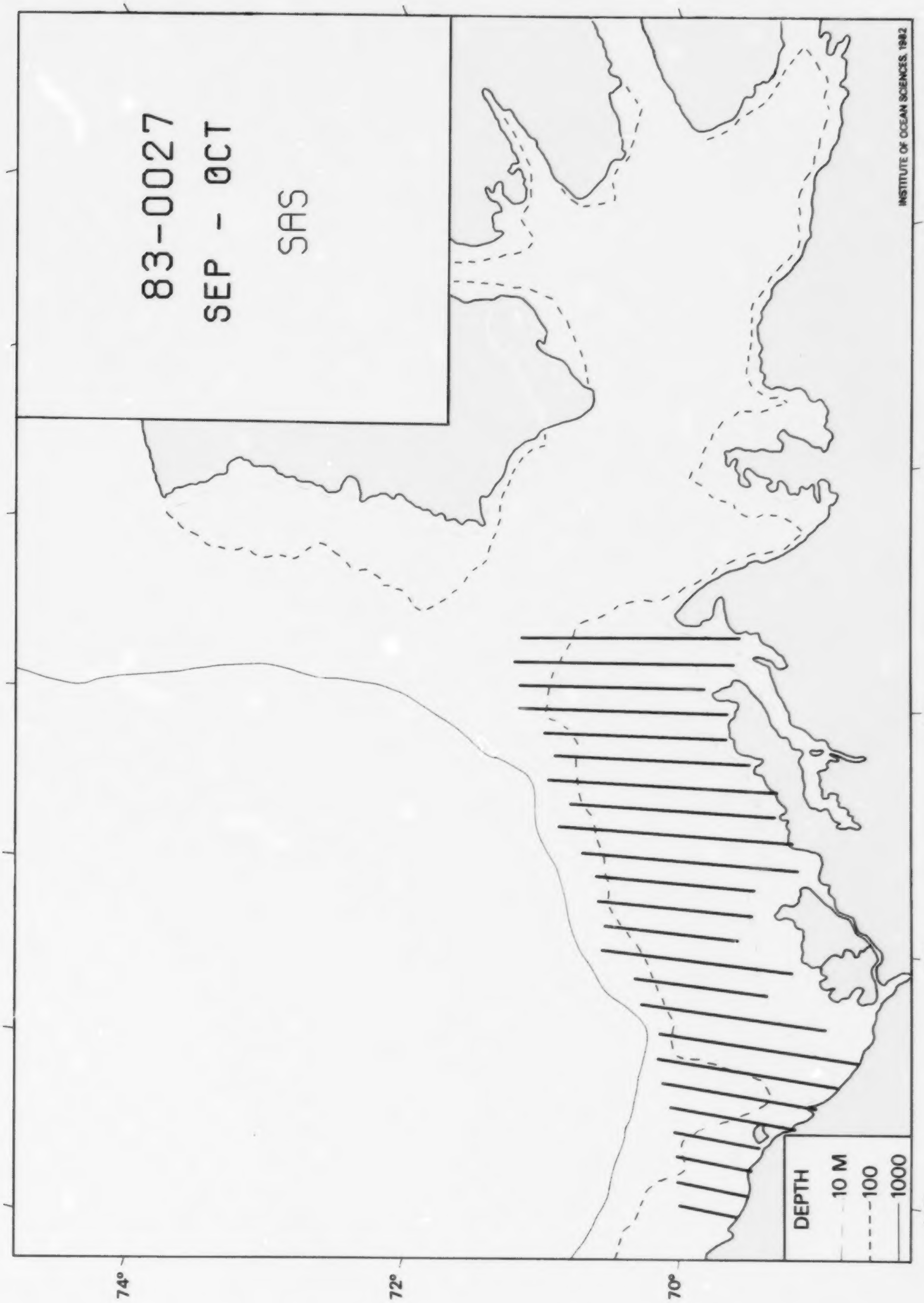
INSTITUTE OF OCEAN SCIENCES, 1982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SEP - OCT
SAS
DEPTH
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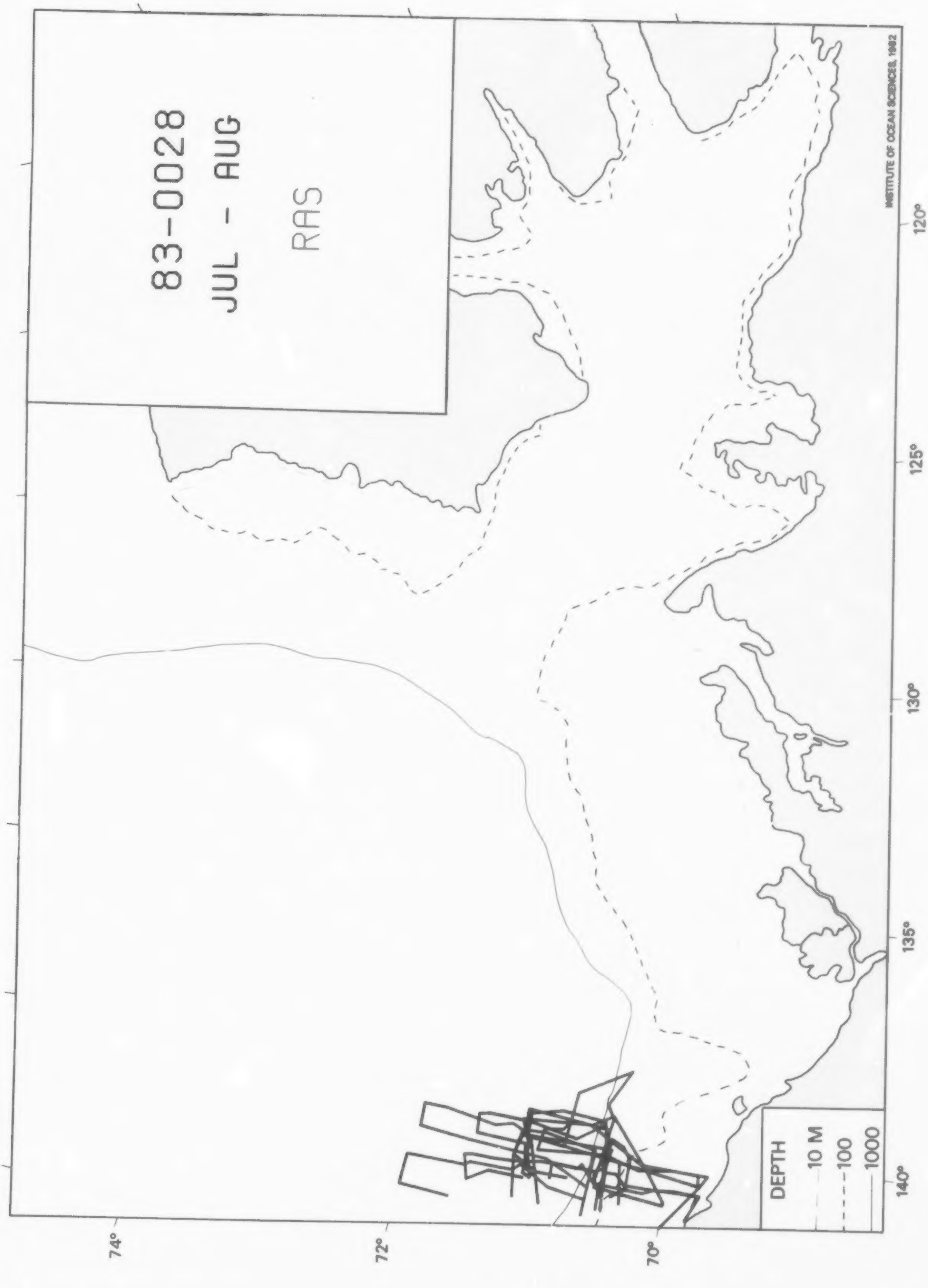
INSTITUTE OF OCEAN SCIENCES, 1982
74°
72°
70°
140°
135°
130°
125°
120°


83-0028
JUL - AUG
RAS
DEPTH
10 M
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74°
72°
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120°
125°
130°
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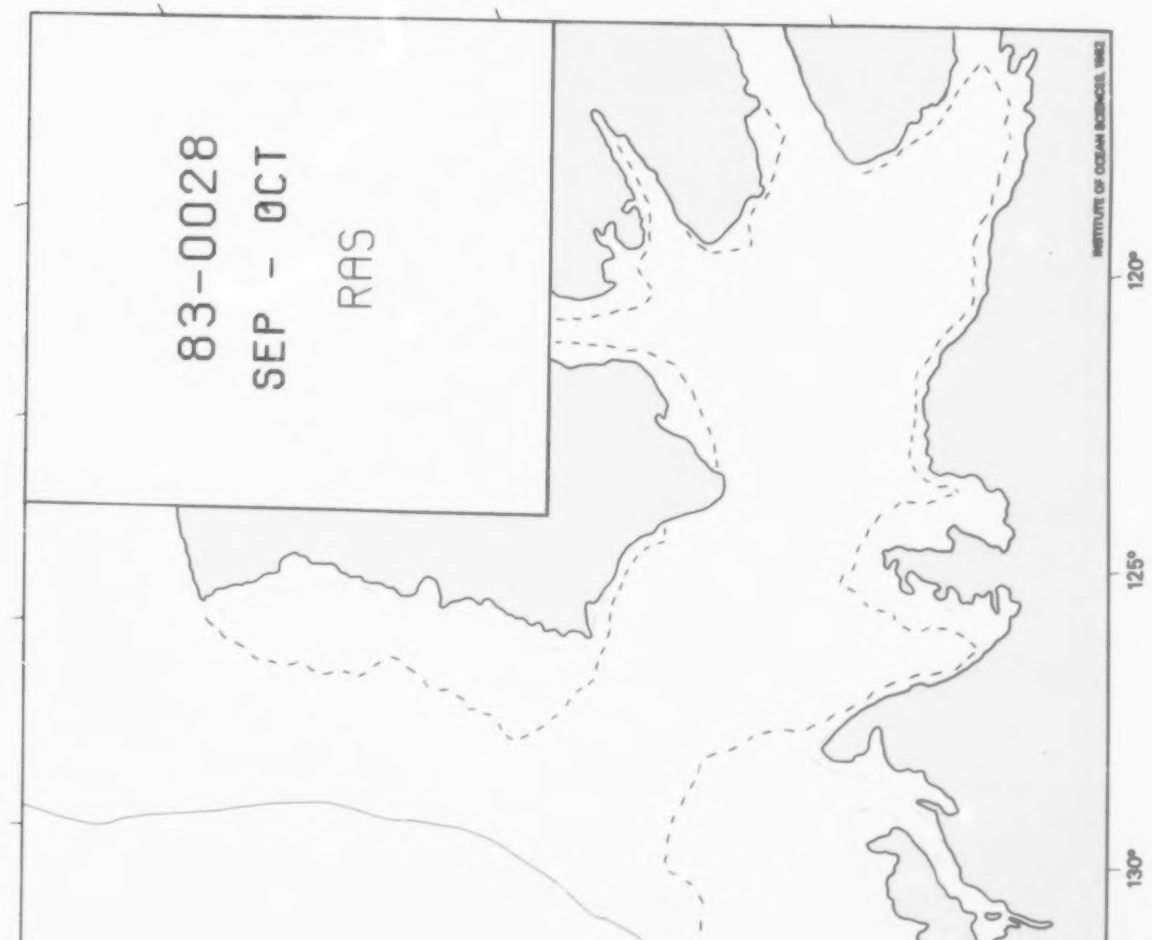
INSTITUTE OF OCEAN SCIENCES, 1982


83-0028
SEP - OCT
RAS
DEPTH
10 M
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74°
72°
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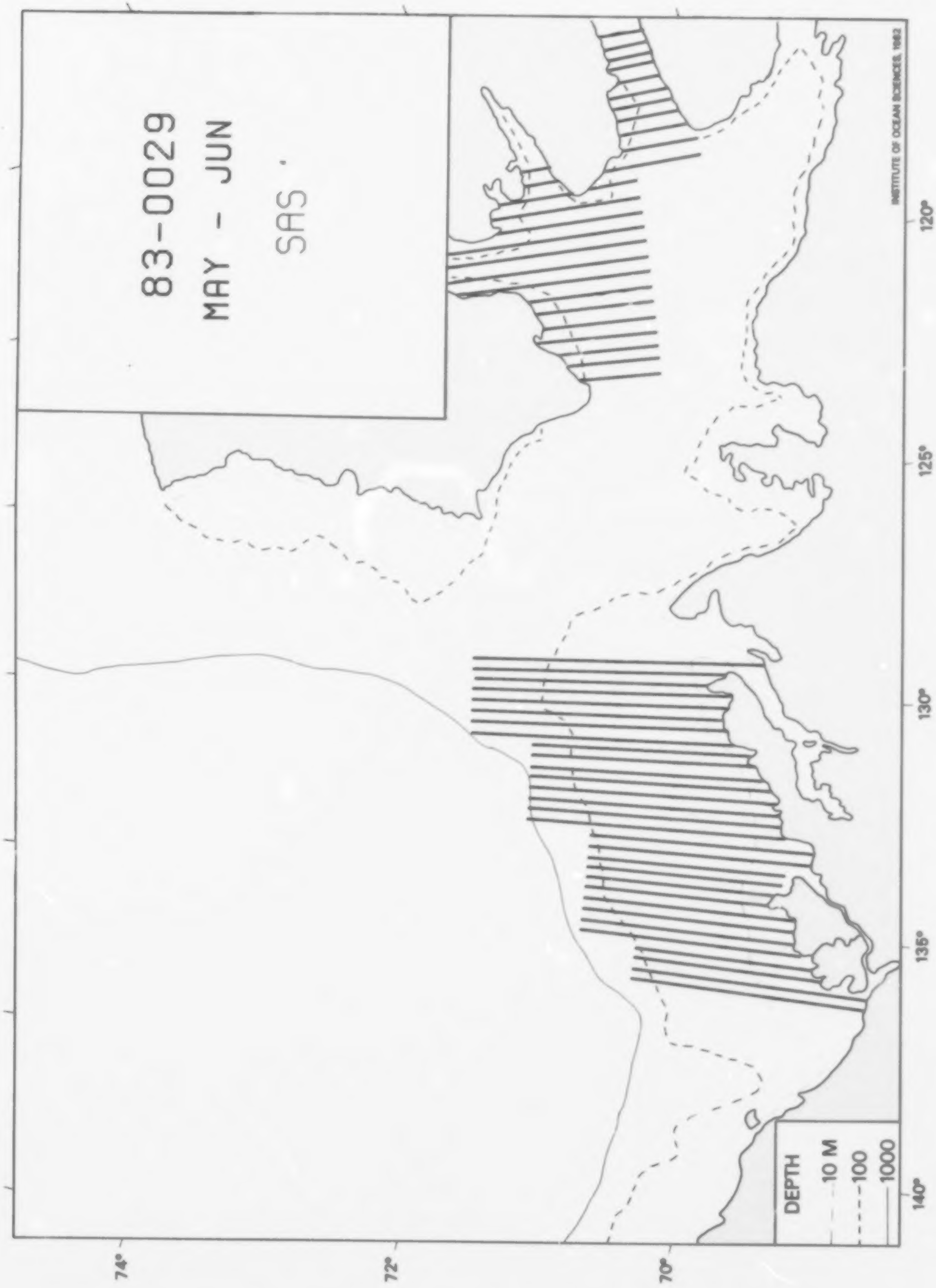
INSTITUTE OF OCEAN SCIENCES, 1982


83-0029
MAY - JUN
SAS
INSTITUTE OF OCEAN SCIENCES, 1982
120°
125°
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140°
74°
72°
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DEPTH
10 M
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10. INDEXES

This section contains five indexes to the data sets. Data sets are listed in chronological order by I.D. number within each index. Index 10.1 is organized according to the geographic areas sampled. Areas are listed in alphabetical order. Only areas shown in Figure 2.1 are indexed. Each data set is listed for each area indicated for that data set in Data Inventory Table 1.

Index 10.2 is according to study method. The study methods are given in alphabetical order by platform (i.e., aircraft, ice, shore, vessel) followed by methods which do not utilize a platform (i.e., hunters' interviews, field examination of harvested whales, incidental reports) and then a listing of data sets for which no method has been specified (NS).

Index 10.3 is according to species. Species are given in the same order as listed in Data Inventory Table 1. Each data set is listed for each species indicated for that data set in Data Inventory Table 1.

Index 10.4 is according to measurement category. Measurement categories are given in the same order as listed in Data Inventory Table 1. Each data set is listed for each measurement category indicated for that data set in Data Inventory Table 1.

Index 10.5 contains the references based on each data set and the form, availability, and location of the original data. If known, the person to contact is indicated. Addresses for the institutions listed are given in Appendix 2.

10.1 GEOGRAPHIC INDEX OF DATA SET SAMPLING AREAS

AMUNDSEN GULF			BANKS ISLAND SHELF	BEAUFORT COAST			BELUGA BAY	CANADA BASIN	CONTINENTAL SLOPE	
$_{18}$48-0001	54-0003	78-0015	$_{18}$50-0001	$_{18}$48-0001	71-0017	79-0028	76-0031	13-0001	$_{18}$50-0001	75-0050
$_{18}$50-0001	54-0011	78-0027	$_{18}$88-0002	$_{18}$50-0001	72-0007	79-0029	76-0034	74-0029	$_{18}$89-0001	75-0071
$_{18}$89-0001	55-0010	79-0028	13-0001	$_{18}$88-0001	72-0015	79-0034	77-0037	74-0031	$_{18}$89-0002	76-0028
$_{18}$89-0002	61-0014	79-0030	51-0002	$_{18}$88-0002	72-0016	80-0019		75-0045	$_{18}$89-0003	77-0036
$_{18}$89-0003	66-0012	79-0033	52-0008	$_{18}$89-0001	72-0048	80-0020		75-0048	$_{18}$90-0001	77-0038
$_{18}$90-0001	72-0016	79-0034	54-0003	$_{18}$89-0002	73-0017	80-0021		76-0028	$_{18}$91-0001	77-0070
$_{18}$91-0001	73-0018	80-0019	54-0011	$_{18}$89-0003	73-0018	80-0022		77-0036	$_{18}$93-0001	78-0015
$_{18}$93-0001	73-0019	80-0024	55-0010	$_{18}$90-0001	73-0019	80-0025		77-0038	$_{18}$93-0002	79-0028
$_{18}$93-0002	73-0025	80-0029	72-0016	$_{18}$91-0001	73-0021	80-0026		78-0015	$_{18}$94-0002	79-0030
$_{18}$94-0002	74-0029	80-0030	73-0025	$_{18}$93-0001	74-0028	80-0029		79-0028	$_{18}$95-0001	79-0031
$_{18}$95-0001	74-0030	81-0023	74-0029	$_{18}$93-0002	74-0029	80-0030		80-0019	$_{18}$97-0001	80-0019
$_{18}$97-0001	74-0031	81-0024	74-0030	$_{18}$94-0001	74-0031	81-0022		80-0021	$_{18}$99-0001	80-0021
$_{18}$99-0001	74-0033	81-0026	74-0031	$_{18}$94-0002	74-0032	81-0023		81-0024	00-0001	80-0023
00-0001	74-0053	82-0001	74-0033	$_{18}$95-0001	74-0033	81-0024		81-0026	00-0002	80-0025
00-0002	75-0045	82-0008	74-0053	$_{18}$97-0001	74-0034	81-0026		83-0026	02-0001	80-0030
02-0001	75-0047	82-0009	75-0045	$_{18}$99-0001	75-0044	81-0027		83-0028	03-0002	81-0024
03-0002	75-0050	82-0011	75-0050	00-0001	75-0045	81-0052			03-0003	81-0026
03-0003	75-0071	83-0024	75-0071	00-0002	75-0046	82-0001			05-0004	82-0009
05-0004	76-0028	83-0026	76-0028	02-0001	75-0047	82-0007			13-0001	82-0010
08-0003	76-0029	83-0029	77-0036	03-0002	75-0048	82-0008			54-0003	82-0011
13-0001	77-0036		77-0038	03-0003	75-0049	82-0009			73-0019	82-0049
51-0002	77-0037		77-0070	05-0004	75-0050	82-0010			73-0025	83-0024
52-0008	77-0038		78-0015	08-0003	76-0028	82-0011			74-0029	83-0026
53-0013	77-0070		79-0027	10-0003	76-0029	82-0049			74-0031	83-0027
			79-0028	13-0001	76-0030	83-0024			74-0053	83-0028
			79-0030	42-0002	77-0036	83-0025			75-0045	83-0029
			80-0019	53-0013	77-0037	83-0026			75-0048	
			80-0021	54-0003	77-0038	83-0027				
			80-0030	54-0011	78-0008	83-0028				
			81-0026	61-0014	78-0015	83-0029				
			83-0026	69-0017	78-0027	83-0031				
				70-0016	79-0027					

DOLPHIN AND UNION STRAIT	EAST MACKENZIE BAY		ESKIMO LAKES	FRANKLIN BAY	KUGMALLIT BAY		LIVERPOOL BAY	MACKENZIE BAY	
79-0027	59-0009	75-0044	66-0011	83-0026	55-0011	75-0044	67-0007	59-0009	75-0046
80-0030	59-0010	75-0046	67-0007		56-0007	75-0046	73-0018	59-0010	75-0047
	60-0010	75-0047	75-0047		59-0009	75-0047	74-0031	60-0010	75-0048
	61-0014	75-0049	75-0050		59-0010	75-0049	76-0029	61-0014	75-0049
	61-0015	75-0050			60-0010	75-0050	78-0008	61-0015	75-0050
	62-0014	76-0029			61-0014	76-0029	79-0027	62-0014	76-0029
	63-0009	76-0034			61-0015	76-0031	80-0030	63-0009	76-0034
	64-0009	76-0035			62-0014	76-0034	81-0023	64-0009	77-0001
	65-0009	77-0001			63-0009	76-0035		65-0009	77-0037
	66-0012	77-0037			64-0009	77-0037		66-0012	77-0038
	69-0017	78-0008			65-0009	77-0038		69-0017	77-0040
	71-0017	79-0034			66-0012	78-0008		70-0016	78-0008
	72-0007	80-0020			67-0006	79-0027		71-0017	78-0009
	72-0015	80-0022			68-0009	79-0034		72-0005	79-0034
	72-0016	80-0029			68-0010	79-0035		72-0007	80-0019
	73-0017	80-0030			70-0016	80-0019		72-0015	80-0020
	73-0018	81-0022			71-0017	80-0020		72-0016	80-0022
	73-0019	81-0023			72-0007	80-0022		73-0017	80-0029
	73-0021	82-0001			72-0015	80-0029		73-0018	80-0030
	74-0028	82-0007			72-0016	80-0030		73-0019	81-0022
	74-0030	82-0008			73-0017	81-0022		73-0021	81-0023
	74-0032	83-0024			73-0018	81-0023		74-0028	82-0001
	74-0033	83-0031			73-0019	82-0001		74-0030	82-0007
					73-0020	82-0007		74-0032	82-0009
					73-0021	82-0008		74-0033	83-0024
					74-0028	82-0011		74-0034	83-0025
					74-0030	83-0024		75-0044	83-0031
					74-0031	83-0025			
					74-0032	83-0026			
					74-0033	83-0027			
					74-0035	83-0029			
						83-0031			

MACKENZIE SHELF			MCKINLEY BAY	MINTO INLET	PRINCE ALBERT SOUND	PRINCE OF WALES STRAIT	SHALLOW BAY
$_{18}$50-0001	74-0029	80-0019	79-0031	77-0037	76-0033	$_{18}$50-0001	73-0022
$_{18}$88-0002	74-0030	80-0021	79-0034	80-0030	77-0037	13-0001	
$_{18}$89-0001	74-0031	80-0022	80-0027	81-0026	80-0030	54-0003	
$_{18}$89-0002	74-0033	80-0023	80-0028	82-0011	81-0024	72-0016	
$_{18}$89-0003	74-0053	80-0025	80-0029	83-0029	81-0026	80-0024	
$_{18}$90-0001	75-0045	80-0026	81-0023		82-0011	80-0030	
$_{18}$91-0001	75-0047	80-0029	81-0025		83-0029	81-0024	
$_{18}$93-0001	75-0048	80-0030	82-0001			81-0026	
$_{18}$93-0002	75-0050	81-0023	82-0029			82-0011	
$_{18}$94-0002	75-0071	81-0024				83-0029	
$_{18}$95-0001	76-0028	81-0025					
$_{18}$97-0001	76-0032	81-0026					
$_{18}$99-0001	77-0036	81-0027					
00-0001	77-0038	81-0052					
00-0002	77-0039	82-0001					
02-0001	77-0070	82-0008					
03-0002	78-0008	82-0009					
03-0003	78-0015	82-0010					
05-0004	78-0027	82-0011					
08-0003	79-0028	82-0029					
13-0001	79-0029	82-0049					
51-0002	79-0030	83-0024					
54-0003	79-0031	83-0025					
54-0011	79-0034	83-0026					
73-0019		83-0027					
73-0025		83-0028					
		83-0029					
		83-0030					

10.2 STUDY METHOD INDEX

Aircraft				Ice	Shore	
Reconnaissance Survey		Systematic Survey		Watch	Reconnaissance Survey	Watch
55-0010	77-0038	73-0019	80-0019	$_{18}$97-0001	$_{18}$94-0001	$_{18}$93-0002
61-0014	77-0070	73-0021	80-0024	13-0001		00-0001
66-0011	78-0008	74-0029	80-0025	66-0011		00-0002
68-0009	79-0028	74-0031	80-0026			08-0003
69-0017	79-0029	74-0032	80-0029			69-0017
72-0005	79-0030	74-0033	81-0023			72-0016
72-0007	79-0033	74-0034	81-0024			72-0048
72-0015	79-0034	75-0045	81-0026			73-0021
72-0016	80-0019	75-0046	82-0001			75-0046
73-0017	80-0020	75-0049	82-0009			75-0048
73-0018	80-0021	75-0050	82-0010			76-0031
73-0019	80-0022	76-0028	82-0011			80-0025
73-0021	80-0025	76-0030	83-0025			80-0028
73-0025	80-0026	76-0034	83-0027			81-0027
74-0030	80-0027	77-0001	83-0029			
74-0031	80-0029	77-0036				
74-0032	80-0030	77-0037				
74-0033	81-0022	78-0008				
74-0053	81-0023	78-0015				
75-0046	81-0026	79-0028				
75-0047	81-0027	79-0033				
75-0048	81-0052	79-0034				
75-0049	82-0001					
75-0050	82-0008					
75-0071	82-0009					
76-0028	82-0049					
76-0029	83-0024					
76-0030	83-0025					
76-0034	83-0026					
77-0001	83-0027					
77-0037	83-0028					

Vessel			Hunters' Interviews (including Whalers' Interviews)		Whalers' Records	Examination of Harvested Whales		Incidental Reports
Reconnaissance Survey		Watch						
$_{18}$48-0001	68-0009	76-0032	$_{18}$48-0001	74-0028	$_{18}$88-0002	$_{18}$89-0003	74-0028	42-0002
$_{18}$50-0001	69-0017	77-0039	$_{18}$50-0001	74-0030	$_{18}$89-0001	$_{18}$90-0001	74-0030	51-0002
$_{18}$89-0003	72-0007	78-0027	$_{18}$89-0002	74-0033	$_{18}$89-0002	$_{18}$93-0001	74-0033	53-0013
$_{18}$90-0001	72-0016	79-0031	$_{18}$89-0003	74-0035	$_{18}$91-0001	$_{18}$93-0002	74-0035	66-0011
$_{18}$93-0001	74-0034	80-0023	$_{18}$90-0001	75-0044		$_{18}$94-0001	75-0044	67-0007
$_{18}$93-0002	76-0031	80-0027	$_{18}$93-0001	75-0050		$_{18}$94-0002	75-0047	72-0007
$_{18}$94-0002	79-0027	81-0025	$_{18}$93-0002	76-0034		$_{18}$95-0001	75-0050	72-0016
$_{18}$95-0001	80-0019	82-0029	$_{18}$94-0001	77-0001		$_{18}$97-0001	76-0029	73-0018
$_{18}$97-0001	80-0021		$_{18}$94-0002	77-0037		$_{18}$99-0001	76-0034	73-0019
$_{18}$99-0001	80-0025		$_{18}$97-0001	77-0040		00-0001	77-0037	74-0030
00-0001	81-0027		$_{18}$99-0001	78-0008		03-0002	77-0040	74-0033
00-0002	82-0008		00-0001	78-0009		55-0011	78-0008	75-0047
02-0001	83-0024		03-0002	79-0027		56-0007	78-0009	75-0050
03-0002			03-0003	79-0034		60-0010	80-0020	76-0029
03-0003			05-0004	79-0035		61-0014	80-0029	76-0032
05-0004			10-0003	80-0020		68-0009	81-0022	76-0034
08-0003			70-0016	80-0029		69-0017	82-0007	77-0037
10-0003			71-0017	81-0022		72-0007	83-0031	77-0038
42-0002			72-0007	81-0023		72-0016		77-0039
51-0002			72-0015	82-0001		73-0017		78-0008
52-0008			72-0016	82-0007		73-0018		78-0027
53-0013			73-0017	83-0031		73-0019		79-0027
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			73-0022					80-0023
								80-0029
								81-0023
								81-0025
								81-0026
								82-0001
								82-0029
								83-0025
								83-0030

Tagging	NS	
68-0009	18 88-0001	
69-0017	54-0011	
72-0016	59-0009	
74-0030	59-0010	
80-0019	61-0015	
	62-0014	
	63-0009	
	64-0009	
	65-0009	
	66-0012	
	67-0006	
	68-0010	
	73-0020	
	76-0033	
	76-0035	

10.3 SPECIES INDEX

BW			GW	HP	KW	N	WW			
1848-0001	59-0009	79-0034	80-0019	73-0022	67-0007	76-0033	1848-0001	70-0016	76-0032	81-0026
1850-0001	67-0007	80-0019	80-0026				1850-0001	71-0017	76-0034	81-0027
1888-0001	72-0016	80-0021	81-0027				1890-0001	72-0005	76-0035	82-0001
1888-0002	73-0018	80-0022	82-0008				1908-0003	72-0007	77-0001	82-0007
1889-0001	73-0021	80-0023					13-0001	72-0015	77-0036	82-0008
1889-0002	73-0025	80-0025					42-0002	72-0016	77-0037	82-0010
1889-0003	74-0029	80-0026					51-0002	73-0017	77-0038	82-0011
1890-0001	74-0030	80-0029					53-0013	73-0018	77-0040	82-0029
1891-0001	74-0031	81-0023					54-0003	73-0019	77-0070	82-0049
1893-0001	74-0032	81-0025					54-0011	73-0020	78-0008	83-0024
1893-0002	75-0045	81-0026					55-0010	73-0025	78-0009	83-0025
1894-0001	75-0047	81-0027					55-0011	74-0028	78-0015	83-0026
1894-0002	75-0048	81-0052					56-0007	74-0029	78-0027	83-0027
1895-0001	75-0050	82-0001					59-0009	74-0030	79-0027	83-0028
1897-0001	76-0028	82-0008					59-0010	74-0031	79-0028	83-0029
1899-0001	76-0029	82-0009					60-0010	74-0032	79-0029	83-0030
00-0001	76-0030	82-0010					61-0014	74-0033	79-0031	83-0031
00-0002	76-0034	82-0029					61-0015	74-0035	79-0034	
02-0001	77-0001	82-0049					62-0014	74-0053	79-0035	
03-0002	77-0036	83-0024					63-0009	75-0044	80-0019	
03-0003	77-0037	83-0026					64-0009	75-0045	80-0020	
08-0003	77-0070	83-0027					65-0009	75-0046	80-0023	
10-0003	78-0008	83-0028					66-0011	75-0047	80-0025	
13-0001	78-0015	83-0029					66-0012	75-0048	80-0026	
42-0002	78-0027	83-0030					67-0006	75-0050	80-0029	
51-0002	79-0027						67-0007	75-0071	81-0022	
53-0013	79-0029						68-0009	76-0028	81-0023	
54-0003	79-0030						68-0010	76-0029	81-0024	
55-0010	79-0031						69-0017	76-0031	81-0025	

BW = bowhead whale
GW = gray whale

HP = harbour porpoise
KW = killer whale

N = narwhal
WW = white whale

10.4 INDEX OF MEASUREMENT CATEGORIES

NUMBER				IDENTIFICATION				MORPHOMETRICS		AGE	
$_{18}$48-0001	60-0010	74-0035	79-0035	$_{18}$48-0001	59-0010	74-0033	79-0034	$_{18}$88-0001	75-0047	$_{18}$48-0001	81-0022
$_{18}$50-0001	61-0014	74-0053	80-0019	$_{18}$50-0001	60-0010	74-0035	79-0035	$_{18}$88-0002	75-0050	$_{18}$89-0003	81-0023
$_{18}$88-0001	61-0015	75-0044	80-0020	$_{18}$88-0001	61-0014	74-0053	80-0019	$_{18}$89-0002	76-0029	$_{18}$93-0002	81-0026
$_{18}$88-0002	62-0014	75-0045	80-0021	$_{18}$88-0002	61-0015	75-0044	80-0020	$_{18}$90-0001	76-0033	08-0003	81-0027
$_{18}$89-0001	63-0009	75-0046	80-0022	$_{18}$89-0001	62-0014	75-0045	80-0021	$_{18}$93-0001	76-0034	53-0013	82-0001
$_{18}$89-0002	64-0009	75-0047	80-0023	$_{18}$89-0002	63-0009	75-0046	80-0022	$_{18}$93-0002	76-0035	54-0011	82-0007
$_{18}$89-0003	65-0009	75-0048	80-0025	$_{18}$89-0003	64-0009	75-0047	80-0023	$_{18}$94-0002	77-0037	55-0011	82-0008
$_{18}$90-0001	66-0011	75-0050	80-0026	$_{18}$90-0001	65-0009	75-0048	80-0025	$_{18}$95-0001	77-0040	56-0007	82-0009
$_{18}$91-0001	66-0012	75-0071	80-0029	$_{18}$91-0001	66-0011	75-0050	80-0026	$_{18}$97-0001	78-0008	60-0010	82-0010
$_{18}$93-0001	67-0006	76-0028	81-0022	$_{18}$93-0001	66-0012	75-0071	80-0029	$_{18}$99-0001	78-0009	61-0014	82-0049
$_{18}$93-0002	67-0007	76-0029	81-0023	$_{18}$93-0002	67-0006	76-0028	81-0022	00-0001	79-0034	66-0011	83-0024
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55-0011	74-0031	79-0030	83-0030	55-0011	74-0030	79-0029	83-0029	74-0033			
59-0009	74-0032	79-0031	83-0031	56-0007	74-0031	79-0030	83-0030	74-0035			
59-0010	74-0033	79-0034		59-0009	74-0032	79-0031	83-0031				

REPRODUCTION	FOOD		PARASITES	MOVEMENTS		BEHAVIOUR		
$_{18}$89-0002	$_{18}$93-0001	82-0001	55-0011	$_{18}$50-0001	78-0008	$_{18}$88-0002	82-0001	
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73-0018	72-0016			68-0009	80-0029	75-0047		
73-0019	73-0019			69-0017	81-0023	75-0050		
74-0030	74-0028			72-0007	81-0024	76-0029		
74-0033	74-0033			72-0016	81-0025	76-0031		
75-0047	75-0047			73-0018	81-0026	76-0034		
75-0050	75-0050			73-0019	81-0027	77-0001		
76-0034	76-0031			73-0025	81-0052	77-0037		
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77-0037	77-0001			74-0030	82-0008	78-0008		
77-0040	77-0037			74-0032	82-0009	78-0015		
78-0008	78-0008			74-0033	82-0010	79-0029		
78-0009	78-0009			74-0053	82-0011	79-0034		
79-0034	79-0034			75-0047	82-0029	80-0019		
80-0020	80-0020			75-0050	82-0049	80-0023		
80-0029	80-0025			76-0029	83-0024	80-0025		
81-0022	80-0026			76-0031	83-0025	80-0026		
81-0023	80-0029			76-0034	83-0026	80-0029		
82-0007	81-0022			77-0001	83-0027	81-0023		
83-0031	81-0023			77-0036	83-0028	81-0026		
	81-0026			77-0037	83-0029	81-0027		
	81-0027			77-0038		81-0052		
				77-0070				

10.5 DATA LOCATION/REFERENCE INDEX

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
$_{18}$48-0001	Richardson, Sir J. 1969. Arctic searching expedition: a journal of a boat-voyage through Rupert's Land and the Arctic Sea, in search of the Discovery ships under command of Sir John Franklin. Volume 1. Greenwood Press, Publishers, New York. 413 p.	-	Public
$_{18}$50-0001	Osborn, S. (ed.). 1969. The discovery of the North-West Passage by H.M.S. "Investigator", Capt. R. M'Clure, 1850, 1851, 1852, 1853, 1854. From the logs and journals of Capt. Robert LeM. M'Clure. M.G. Hurtig Ltd., Edmonton. 405 p.	-	Public
$_{18}$88-0001	Hadley, J. 1915. Whaling off the Alaskan coast, from the journal of Jack Hadley of Point Barrow, Alaska. Bull. Am. Geogr. Soc. 47:905-921.	-	Public
$_{18}$88-0002	Bockstoce, J.R. 1977. Steam whaling in the Western Arctic. Old Dartmouth Historical Society, New Bedford, Massachusetts. 127 p.	-	Public
$_{18}$89-0001	Townsend, C.H. 1935. The distribution of certain whales as shown by logbook records of American whaleships. Zoologica 19(1):1-53.	-	Public
$_{18}$89-0002	Bockstoce, J.R. and D.B. Botkin. 1983. The historical status and reduction of the western Arctic bowhead whales (Balaena mysticetus) populacion by the pelagic whaling industry, 1848-1914. Rep. int. Whal. Commn (Special Issue 5): 107-141.	-	Public
$_{18}$89-0003	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
$_{18}$90-0001	-	Computer discs	Not known New Bedford Whaling Museum contact: J.R. Bockstoce
$_{18}$91-0001	Fraker, M.A. and J.R. Bockstoce. 1980. Summer distribution of bowhead whales in the eastern Beaufort Sea. Mar. Fish. Rev. 42(9-10): 57-64.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
$_{18}$93-0001	Cook, J.A. 1926. Pursuing the whale. A quarter-century of whaling in the Arctic. The Riverside Press, Cambridge, Massachusetts. 344 p.	-	Public
$_{18}$93-0002	-	Computer discs	Not known New Bedford Whaling Museum contact: J.R. Bockstoce
	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
$_{18}$94-0001	Russell, F. 1898. Explorations in the far north. University of Iowa Press, Iowa City. 290 p.	-	Public
$_{18}$94-0002	Cook, J.A. 1926. Pursuing the whale. A quarter-century of whaling in the Arctic. The Riverside Press, Cambridge, Massachusetts. 344 p.	-	Public
$_{18}$95-0001	West, E.L. and E.R. Mayhem. 1965. Captain's papers: a log of whaling and other sea experiences. Barre Publishers, Barre, Massachusetts. 172 p.	-	Public
$_{18}$97-0001	-	Computer discs	Not known New Bedford Whaling Museum contact: J.R. Bockstoce
	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
$_{18}$99-0001	Cook, J.A. 1926. Pursuing the whale. A quarter-century of whaling in the Arctic. The Riverside Press, Cambridge, Massachusetts. 344 p.	-	Public
00-0001	Cook, J.A. 1926. Pursuing the whale. A quarter-century of whaling in the Arctic. The Riverside Press, Cambridge, Massachusetts. 344 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
00-0002	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
02-0001	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
03-0002	Cook, J.A. 1926. Pursuing the whale. A quarter-century of whaling in the Arctic. The Riverside Press, Cambridge, Massachusetts. 344 p.	-	Public
03-0003	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
05-0004	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
08-0003	Anderson, R.M. 1926. Report on the natural history collection of the expedition. Pages 436-527. In: V. Stefansson. My life with the Eskimo. Macmillan Co., New York.	-	Public
10-0003	Bodfish, H.H. 1936. Chasing the bowhead. Harvard University Press, Cambridge, Massachusetts. 281 p.	-	Public
13-0001	Stefansson, V. 1944. The friendly arctic. Macmillan Co., New York. 812 p.	-	Public
42-0002	Clarke, C.H.D. 1944. Notes on the status and distribution of certain mammals and birds in the Mackenzie River and western Arctic area in 1942 and 1943. Can. Field - Nat. 58: 97-103.	-	Public
51-0002	Manning, T.H. and A.H. Macpherson. 1958. The mammals of Banks Island. Arctic Institute of North America, Technical Paper No. 2. 74 p.	-	Public
52-0008	Manning, T.H. and A.H. Macpherson. 1958. The mammals of Banks Island. Arctic Institute of North America, Technical Paper No. 2. 74 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
53-0013	Hohn, E.O. 1955. Birds and mammals observed on a cruise in Amundsen Gulf, N.W.T., July 29th - August 16th, 1953. Can. Field-Nat. 69: 41-44.	-	Public
54-0003	Neave, F. 1954. Western Arctic. Pages 165-166. In: Annual report of the Pacific Biological Station, Nanaimo.	-	Public
54-0011	Sergeant, D.E. 1962. The biology and hunting of beluga or white whales in the Canadian Arctic. Fish. Res. Board Can. Circular No. 8. 13 p.	-	Public
55-0010	McEwan, E.H. 1955. A biological survey of the west coast of Banks Island - 1955. Can. Wildl. Serv. Rep. CWS-22-55, Ottawa. 64 p.	-	Public
55-0011	Sergeant, D.E. and P.F. Brodie. 1969. Body size in white whales, *Delphinapterus leucas*. J. Fish. Res. Board Can. 26: 2561-2580.	-	Public
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705 - 719. In: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
56-0007	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705-719. In: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
59-0009	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public
59-0010	Sergeant, D.E. 1962. The biology and hunting of beluga or white whales in the Canadian Arctic. Fish. Res. Board Can. Circular No. 8. 13 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
60-0010	Sergeant, D.E. and P.F. Brodie. 1969. Body size in white whales, *Delphinapterus leucas*. J. Fish. Res. Board Can. 26:2561-2580.	-	Public
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705-719. *In*: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
61-0014	Sergeant, D.E. and P.F. Brodie. 1969. Body size in white whales, *Delphinapterus leucas*. J. Fish. Res. Board Can. 26:2561-2580.	-	Public
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white shales in the eastern Beaufort Sea. Pages 705-719. *In*: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
61-0015	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public
62-0014	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public
63-0009	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public
64-0009	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
65-0009	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public
66-0011	Hill, R.M. 1967. Observations on beluga whales trapped by ice in Eskimo Lakes, winter 1966/67. Unpubl. rep. by Inuvik Research Laboratory, Dep. of Indian Affairs and Northern Development. 13 p.	-	Public
66-0012	Bissett, D. 1967. The lower Mackenzie Region. An area economic survey. Part 1. Unpubl. rep. for Ind. Div. of Northern Administration Branch of Dep. of Indian Affairs and Northern Development. 520 p.	-	Public
67-0006	Bourque, J.W. 1967. Report of Fort McPherson whaling project. Unpubl. rep. by Game Management Service, Government of the Northwest Territories. 4 p.	-	Public
67-0007	Barry, T.W. 1967. Geese of the Anderson River Delta, N.W.T. Ph.D. Thesis, University of Alberta, Edmonton. 212 p.	-	Public
68-0009	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant
	Sergeant, D.E. and P.F. Brodie. 1969. Body size in white whales, Delphinapterus leucas. J. Fish. Res. Board Can. 26: 2561-2580.	-	Public
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705-719. In: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
68-0010	Bourque, J.W. 1968. Report on the whaling project for the summer of 1968. Unpubl. rep. by Game Management Service, Government of the Northwest Territories. 3 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
69-0017	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705-719. In: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
70-0016	Hunt, W.J. 1979. Domestic whaling in the Mackenzie Estuary, Northwest Territories. Fish. Mar. Serv. Tech. Rep. No. 769. 14 p.	-	Public
71-0017	Hunt, W.J. 1979. Domestic whaling in the Mackenzie Estuary, Northwest Territories. Fish. Mar. Serv. Tech. Rep. No. 769. 14 p.	-	Public
72-0005	Addison, R.F. and P.F. Brodie. 1973. Occurrence of DDT residues in beluga whales (Delphinapterus leucas) from the Mackenzie Delta,	-	Public
72-0007	Slaney, F.F. and Co. Ltd. 1973. Environmental impact assessment, Immerk artificial island construction, Mackenzie Bay, N.W.T. Volume II. Environmental studies. Unpubl. rep. for Imperial Oil Ltd., Calgary. 59 p.	-	Public
72-0015	Hunt, W.J. 1979. Domestic whaling in the Mackenzie Estuary, Northwest Territories. Fish. Mar. Serv. Tech. Rep. No. 769. 14 p.	-	Public
72-0016	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705-719. In: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
72-0048	-	Not known	Not known LGL Ltd. contact: W.R. Koski
73-0017	Hunt, W.J. 1979. Domestic whaling in the Mackenzie Estuary, Northwest Territories. Fish. Mar. Serv. Tech. Rep. No. 769. 14 p.	-	Public
73-0018	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant
	Sergeant, D.E. and W. Hoek. 1974. Seasonal distribution of bowhead and white whales in the eastern Beaufort Sea. Pages 705-719. In: J.C. Reed and J.E. Sater (eds.). The coast and shelf of the Beaufort Sea. Arctic Institute of North America, Arlington, Virginia.	-	Public
73-0019	Slaney, F.F. and Co. Ltd. 1974. White whale study. Herschel Island - Cape Dalhousie coastal region of the Beaufort Sea. Unpubl. rep. for Imperial Oil Ltd., Calgary. 29 p.	-	Not known
73-0020	Bourque, J.W. 1973. Mackenzie Delta whaling project. Unpubl. rep. by Game Management Service, Government of the Northwest Territories. 5 p.	-	Public
73-0021	-	Not known	Not known LGL Ltd. contact: W.R. Koski
73-0022	van Bree, P.J.H., D.E. Sergeant and W. Hoek. 1977. A harbour porpoise, Phocoena phocoena (Linnaeus, 1758), from the Mackenzie River delta, Northwest Territories, Canada. (Notes on Cetacea, Delphinoidea VIII). Beaufortia 26(333): 99-105.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
73-0025	-	Field notes	Public Canadian Wildlife Service contact: I. Stirling
74-0028	Hunt, W.J. 1979. Domestic whaling in the Mackenzie Estuary, Northwest Territories. Fish. Mar. Serv. Tech. Rep. No. 769. 14 p.	-	Public
74-0029	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
	Fraker, M.A. 1979. Spring migration of bowhead (Balaena mysticetus) and white whales (Delphinapterus leucas) in the Beaufort Sea. Fish. Mar. Serv. Tech. Rep. No. 859. 36 p.	-	Public
74-0030	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant
	Sergeant, D.E. and P.F. Brodie. 1975. Identity, abundance, and present status of populations of white whales, Delphinapterus leucas, in North America. J. Fish. Res. Board. Can. 32:1047-1054.	-	Public
74-0031	-	Not known	Not known Renewable Resources Consulting Services
74-0032	-	Not known	Not known LGL Ltd. contact: W.R. Koski
74-0033	Slaney, F.F. and Co. Ltd. 1975. Summer environmental program, Mackenzie River estuary. Volume 3. White whale studies. Unpubl. rep. for Imperial Oil Ltd., Calgary. 53 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
74-0034	-	Field notes	Public Canadian Wildlife Service contact: T.W. Barry
74-0035	Bourque, J.W. 1974. Mackenzie Delta whaling project. Unpubl. rep. by Game Management Service, Government of the Northwest Territories. 6 p.	-	Public
74-0053	-	Field notes	Public Canadian Wildlife Service contact: I. Stirling
75-0044	Hunt, W.J. 1979. Domestic whaling in the Mackenzie Estuary, Northwest Territories. Fish. Mar. Serv. Tech. Rep. No. 769. 14 p.	-	Public
75-0045	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
	Fraker, M.A. 1979. Spring migration of bowhead (*Balaena mysticetus*) and white whales (*Delphinapterus leucas*) in the Beaufort Sea. Fish. Mar. Serv. Tech. Rep. No. 859. 36 p.	-	Public
75-0046	-	Maps	Public P.N. Research Projects contact: P. Norton
	Slaney, F.F. and Co. Ltd. 1975. Monitoring of barge and helicopter movements with regard to waterfowl and beluga whales, Mackenzie Bay, N.W.T. Unpubl. rep. for Sun Oil Co. Ltd., Calgary. 12 p.	-	Not known
75-0047	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
75-0048	-	Computer printouts	Not known LGL Ltd. contact: S.R. Johnson
75-0049	-	Not known	Not known LGL Ltd. contact: W.R. Koski
75-0050	Slaney, F.F. and Co. Ltd. 1976. 1975 summer environmental program, Mackenzie River Estuary. Volume 2. White whale studies. Unpubl. rep. for Imperial Oil Ltd., Calgary. 61 p.	-	Public
75-0071	-	Field notes	Public Canadian Wildlife Service contact: I. Stirling
76-0028	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
	Fraker, M.A. 1979. Spring migration of bowhead (Balaena mysticetus) and white whales (Delphinapterus leucas) in the Beaufort Sea. Fish. Mar. Serv. Tech. Rep. No. 859. 36 p.	-	Public
76-0029	-	Field notes	Public Arctic Biological Station contact: D.E. Sergeant
76-0030	-	Not known	Not known LGL Ltd. contact: W.R. Koski
76-0031	-	Tapes	Not known West Coast Whale Research Foundation contact: J.K.B. Ford

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
76-0031 Cont'd	Ford, J. 1977. White whale - offshore exploration acoustic study. Unpubl. F.F. Slaney and Co. Ltd. rep. for Imperial Oil Ltd., Calgary. 21 p.	-	Public
76-0032	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services
76-0033	Smith, T.G. 1977. The occurrence of a narwhal (*Monodon monoceros*) in Prince Albert Sound, western Victoria Island, Northwest Territories. Can. Field-Nat. 91:299.	-	Public
76-0034	-	Tape transcriptions	Public P.N. Research Projects contact: P. Norton
	Fraker, M.A. 1977. The 1976 white whale monitoring program, Mackenzie Estuary, N.W.T. Unpubl. F.F. Slaney and Co. Ltd. rep. for Imperial Oil Ltd., Calgary. 73 p.	-	Public
76-0035	-	Not known	Public Freshwater Institute contact: T. Strong
	Fraker, M.A. 1977. The 1976 white whale monitoring program, Mackenzie Estuary, N.W.T. Unpubl. F.F. Slaney and Co. Ltd. rep. for Imperial Oil Ltd., Calgary. 73 p.	-	Public
77-0001	-	Tape transcriptions	Public P.N. Research Projects contact: P. Norton

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
77-0001 Cont'd	Fraker, M.A., C.D. Gordon, J.W. McDonald, J.K.B. Ford and G. Cambers. 1979. White whale (Delphinapterus leucas) distribution and abundance and the relationship to physical and chemical characteristics of the Mackenzie Estuary. Fish. Mar. Serv. Tech. Rep. No. 863. 56 p.	-	Public
77-0036	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
	Fraker, M.A. 1979. Spring migration of bowhead (Balaena mysticetus) and white whales (Delphinapterus leucas) in the Beaufort Sea. Fish. Mar. Serv. Tech. Rep. No. 859. 36 p.	-	Publ
77-0037	-	Tape transcriptions	Public P.N. Research Projects contact: P. Norton
	Beak Consultants Limited. 1978. Heavy metals project, Mackenzie Delta and Estuary. Unpubl. rep. for Imperial Oil Ltd., Calgary. 63 p.	-	Public
	Fraker, M.A. 1977. The 1977 whale monitoring program, Mackenzie Estuary, N.W.T. Unpubl. F.F. Slaney and Co. Ltd. rep. for Imperial Oil Ltd., Calgary. 53 p.	-	Public
77-0038	-	Tape transcriptions	Public P.N. Research Projects contact: P. Norton
	Fraker, M.A. 1979. Spring migration of bowhead (Balaena mysticetus) and white whales (Delphinapterus leucas) in the Beaufort Sea. Fish. Mar. Serv. Tech. Rep. No. 859. 36 p.	-	Public
77-0039	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
77-0040	-	-	Public Freshwater Institute contact: T. Strong
77-0070	-	Field notes	Public Canadian Wildlife Service contact: I. Stirling
78-0008	-	Tape transcriptions	Public P.N. Research Projects contact: P. Norton
	Fraker, M.A. 1978. The 1978 whale monitoring program, Mackenzie Estuary, N.W.T. Unpubl. F.F. Slaney and Co. Ltd. rep. for Esso Resources Canada Ltd., Calgary. 28 p.	-	Public
78-0009	-	Field sheets	Public Freshwater Institute contact: T. Strong
78-0015	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
78-0027	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services
79-0027	Hazard, K.W. and J.C. Cubbage. 1982. Bowhead whale distribution in the southeastern Beaufort Sea and Amundsen Gulf, summer 1979. Arctic 35:519-523.	-	Public
79-0028	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
79-0029	-	Not known	Proprietary University of California at Santa Cruz contact: T. Dohl
79-0030	-	Field notes	Public Canadian Wildlife Service contact: I. Stirling
79-0031	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services
79-0033	Ward, J.G. 1979. Bird and mammal surveys in the Cape Parry area, Northwest Territories, June-August 1979. Unpubl. LGL Ltd. rep. for Dome Petroleum Ltd., Calgary. 40 p.	-	Not known
79-0034	-	Tape transcriptions	Public LGL Ltd. contact: K. Finley
	Fraker, M.A. and P.N. Fraker. 1979. The 1979 whale monitoring program, Mackenzie Estuary. Unpubl. LGL Ltd. rep. for Esso Resources Canada Ltd., Calgary. 51 p.	-	Public
79-0035	-	Field sheets	Public Freshwater Institute contact: T. Strong
80-0019	Hobbs, L.J. and M.E. Goebel. 1982. Bowhead whale radio tagging feasibility study and review of large cetacean tagging. NOAA Technical Memorandum NMFS F/NWC-21. 68 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
80-0020	-	Field sheets	Public Freshwater Institute contact: T. Strong
	DFO (Dep. of Fisheries and Oceans). 1980. Beluga whale monitoring program, Canadian Western Arctic, summer 1980. Unpubl. rep. by Inuvik Station, Inuvik. 36 p.	-	Public
80-0021	-	Not known	Not known Cascadia Research Collective contact: J.C. Cubbage
	Cubbage, J.C. and D.J. Rugh. 1981. Bowhead whale length estimates and calf counts in the eastern Beaufort Sea, 1980. Rep. int. Whal. Commn (SC/33/PS6).	-	Public
80-0022	Ljungblad, D.K. 1981. Aerial surveys of endangered whales in the Beaufort Sea, Chukchi Sea, and northern Bering Sea. Naval Ocean Systems Center Tech. Doc. No. 449. 49 p.	-	Not known
80-0023	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services
80-0024	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
80-0025	-	Field sheets Computer Printouts Videotapes	Proprietary LGL Ltd. contact: W.J. Richardson
	Richardson, W.J. (ed.). 1981. Behavior, disturbance responses and feeding of bowhead whales in the Beaufort Sea, 1980. Unpubl.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
80-0025 Cont'd	LGL Ecol. Res. Assoc. Inc. rep. for U.S. Bureau of Land Management, Washington. 273 p.		
	Richardson, W.J. (ed.). 1982. Behavior, disturbance responses and feeding of bowhead whales *Balaena mysticetus* in the Beaufort Sea, 1980-81. Unpubl. LGL Ecol. Res. Assoc. Inc. rep. for U.S. Bureau of Land Management, Washington. 456 p.	-	Public
	Rugh, D.J. and M.A. Fraker. 1981. Gray whale (*Eschrichtius robustus*) sightings in eastern Beaufort Sea. *Arctic 34:186-187*.	-	Public
80-0026	-	Computer printouts	Public LGL Ltd. contact: R.A. Davis
	Renaud, W.E. and R.A. Davis. 1981. Aerial surveys of bowhead whales and other marine mammals off the Tuktoyaktuk Peninsula, N.W.T., August - September 1980. Unpubl. LGL Ltd. rep. for Dome Petroleum Ltd., Calgary. 55 p.	-	Public
	Rugh, D.J. and M.A. Fraker. 1981. Gray whale (*Eschrichtius robustus*) sightings in eastern Beaufort Sea. *Arctic 34: 186-187*.	-	Public
80-0027	Ward, J.G. 1981. Wildlife observations during dredging operations in McKinley Bay, July - August 1980. Unpubl. rep. by Dome Petroleum Ltd., Calgary. 53 p.	-	Not known
80-0028	Dickens, D.F. and I.A. Buist. 1980. Oil and gas under sea ice. 1st draft - Volume I. Unpubl. rep. for Dome Petroleum Ltd., Calgary. 262 p.	-	Not known
80-0029	-	Tape transcriptions	Public LGL Ltd. contact: K. Finley

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
80-0029 Cont'd	Fraker, P.N. and M.A. Fraker. 1981. The 1980 whale monitoring program, Mackenzie Estuary. Unpubl. LGL Ltd. rep. for Esso Resources Canada Ltd., Calgary. 98 p.	-	Public
80-0030	-	Field notes	Public Canadian Wildlife Service contact: T.W. Barry
81-0022	-	Field sheets	Public Freshwater Institute contact: T. Strong
	DFO (Dep. of Fisheries and Oceans). 1981. Beluga whale observers program, Canadian Western Arctic, summer 1981. Unpubl. rep. by Inuvik Station, Inuvik. 54 p.	-	Public
81-0023	-	Tape transcriptions	Public LGL Ltd. contact: K. Finley
	Norton Fraker, P. and M.A. Fraker. 1982. The 1981 whale monitoring program, Mackenzie Estuary. Unpubl. LGL Ltd. rep. for Esso Resources Canada Ltd., Dome Petroleum Ltd., and Gulf Canada Resources Inc., Calgary. 74 p.	-	Public
81-0024	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
81-0025	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
81-0026	-	Computer printouts	Not known LGL Ltd. contact: R.A. Davis
	Davis, R.A., W.R. Koski, W.J. Richardson, C.R. Evans and W.G. Alliston. 1982. Distribution, numbers and productivity of the Western Arctic stock of bowhead whales in the eastern Beaufort Sea and Amundsen Gulf, summer 1981. Unpubl. LGL Ltd. rep. for Sohio Alaska Petroleum Co., Dome Petroleum Ltd., ARCO Alaska Inc., B.P. Alaska Exploration Inc., Chevron U.S.A. Inc., Exxon Co. U.S.A., Phillips Petroleum Co., Shell Oil Co., State of Alaska, Esso Resources Canada Ltd. and Gulf Canada Resources Inc. 134 p.	-	Public
	Davis, R.A. and C.R. Evans. 1982. Offshore distribution and numbers of white whales in the eastern Beaufort Sea and Amundsen Gulf, summer 1981. Unpubl. LGL Ltd. rep. for Sohio Alaska Petroleum Co., Dome Petroleum Ltd., ARCO Alaska Inc., B.P. Alaska Exploration Inc., Chevron U.S.A. Inc., Exxon Co. U.S.A., Phillips Petroleum Co., Shell Oil Co., State of Alaska, Esso Resources Canada Ltd. and Gulf Canada Resources Inc. 76 p.	-	Public
81-0027	-	Field sheets Computer printouts Videotapes	Proprietary LGL Ltd. contact: W.J. Richardson
	Richardson, W.J. (ed.). 1982. Behavior, disturbance responses and feeding of bowhead whales *Balaena mysticetus* in the Beaufort Sea, 1980-81. Unpubl. LGL Ecol. Res. Assoc. Inc. rep. for U.S. Bureau of Land Management, Washington. 455 p.	-	Public
81-0052	Ljungblad, D.K., S.E. Moore, D.R. Van Schoik and C.S. Winchell. 1982. Aerial surveys of endangered whales in the Beaufort, Chukchi and northern Bering Seas. Naval Ocean Systems Center Tech. Doc. No. 486. 406 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
82-0001	-	Tape transcriptions	Public LGL Ltd. contact: K. Finley
	Norton Fraker, P. 1983. The 1982 white whale monitoring program, Mackenzie Estuary. Part I. Migration, distribution and abundance of whales and effects of industry activities on whales. Unpubl. LGL Ltd. rep. for Esso Resources Canada Ltd., Dome Petroleum Ltd. and Gulf Canada Resources Inc., Calgary. 54 p.	-	Public
82-0007	-	Field sheets	Public Freshwater Institute contact: T. Strong
82-0008	-	Field sheets Computer Printouts Videotapes	Proprietary LGL Ltd. contact: W.J. Richardson
	Richardson, W.J. (ed.). 1983. Behavior disturbance responses and distribution of bowhead whales *Balaena mysticetus* in the eastern Beaufort Sea, 1982. Unpubl. LGL Ecol. Res. Assoc. Inc. rep. for U.S. Minerals Management Service, Reston, Virginia. 357 p.	-	Public
82-0009	-	Not known	Not known LGL Ltd. contact: R.A. Davis
	Davis, R.A., W.R. Koski and G.W. Miller. 1983. Preliminary assessment of the length - frequency distribution and gross annual reproductive rate of the western arctic bowhead whale as determined with low-level aerial photography, with comments on life history. Unpubl. LGL Ltd. rep. for U.S. National Marine Mammal Laboratory, Seattle. 91 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
82-0010	-	-	Public ESL Environmental Sciences Ltd. contact: L.A. Harwood
	Harwood, L.A. and J.K.B. Ford. 1983. Systematic aerial surveys of bowhead whales and other marine mammals in the southeastern Beaufort Sea, August - September 1982. Unpubl. ESL Environmental Sciences Ltd. rep. for Dome Petroleum Ltd. and Gulf Canada Resources Inc., Calgary. 70 p.	-	Public
82-0011	-	Field sheets	Public Canadian Wildlife Service contact: I. Stirling
82-0029	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services
82-0049	-	Not known	Not known Naval Ocean Systems Center contact: D.K. Ljungblad
	Ljungblad, D.K., S.E. Moore and D.R. Van Schoik. 1983. Aerial surveys of endangered whales in the Beaufort, eastern Chukchi, and northern Bering Seas, 1982. Naval Ocean Systems Center Tech. Doc. No. 605. 382 p.	-	Public
83-0024	-	Field sheets Computer Printouts Videotapes	Proprietary LGL Ltd. contact: W.J. Richardson

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
83-0024 Cont'd	Richardson, W.J. (ed.). 1984. Behavior, disturbance responses and distribution of bowhead whales *Balaena mysticetus* in the eastern Beaufort Sea, 1983. Unpubl. LGL Ecol. Res. Assoc. Inc. rep. for U.S. Minerals Management Service, Reston, Virginia. 332 p.	-	Not known
83-0025	-	-	Public Ian Robertson Consulting Ltd. contact: I. Robertson
	Robertson, I. and J.D. Millar. 1984. The 1983 white whale monitoring program Mackenzie Estuary. Part I. Unpubl. Ian Robertson Consulting Ltd. rep. for Esso Resources Canada Ltd., Dome Petroleum Ltd., and Gulf Canada Resources Inc., Calgary. 45 p.	-	Public
83-0026	Cubbage, J.C., J. Calambokidis and D.J. Rugh. 1984. Bowhead whale length measured through stereophotogrammetry. Unpubl. Cascadia Research Collective and National Marine Mammal Laboratory rep. for National Marine Fisheries Service, Seattle. 70 p.	-	Not known
83-0027	-	Not known	Not known LGL Ltd. contact: R.A. Davis
	McLaren, P.L. and R.A. Davis. 1984. Distribution of bowhead whales and other marine mammals in the southeast Beaufort Sea, August - September 1983. Unpubl. LGL Ltd. rep. for Dome Petroleum Ltd., and Gulf Canada Resources Inc., Calgary.	-	Not known
83-0028	-	Not known	Not known Naval Ocean Systems Center contact: D.K. Ljungblad
	Ljungblad, D.K., S.E. Moore and D.R. Van Schoik. 1984. Aerial surveys of endangered whales in the northern Bering, eastern Chukchi and Alaskan Beaufort Seas, 1983: with a five year review, 1979-1983. Naval Ocean Systems Center Tech. Rep. 955. 119 p.	-	Public

DATA SET I.D.	REFERENCE	STATUS	AVAILABILITY
83-0029	-	Field sheets	Public Freshwater Institute contact: M.C.S. Kingsley
83-0030	-	Field sheets	Public Dome Petroleum Ltd. contact: Director, Environmental and Socio-economic Services
83-0031	-	Field sheets	Public Freshwater Institute contact: T. Strong

APPENDIX 1

REMARKS BY DATA SET NUMBER

This appendix contains brief descriptive comments relevant to the assigned ratings of particular measurements in some data sets. Only comments supplementary to the notes in the "Rating" column of Data Inventory Table 2 are included. For some data sets, general comments about the entire study are also given. Data sets are listed in chronological order according to I.D. number. If all pertinent comments about a particular data set are given in the data inventory tables, that data set is not listed in this appendix.

Data Set $_{18}$89-0001

Number struck, killed, and lost (= whales harpooned, brought to vessel and then lost) were possibly included in the number landed or tallied separately. The text only indicates the relative number of whales landed to whales killed and lost; the origin of this ratio is not given. Examination of this data set by Bockstoce and Botkin (1983) revealed that "...occasionally gray whales and right whales were counted as bowheads and that some bowhead captures were overlooked."

Data Set $_{18}$89-0002

Occasionally subjective judgment is required to determine if a struck and lost whale was or was not killed. The sample size given in Table 2 is based on the assumption that all voyages from 1890 through 1914 extended into Canadian waters.

Data Set $_{18}$91-0001

Data were compiled by zone. Franklin Bay and the area seaward of the east coast of Cape Bathurst are included in the Bathurst Zone, not in Amundsen Gulf.

Data Set 51-0002

Data mentioned in Manning and Macpherson (1958) from unavailable sources are included in this data set. The measurements from these unavailable sources are given a "2" rating and described by Note 9.

Data Set 55-0011

At least some measurements were collected at Whitefish Station on Kugmallit Bay, but the exact type and amount of data are not known. Sample sizes in Data Inventory Table 2 are from data pooled from several data sets.

Data Set 56-0007

At least some measurements were collected at Whitefish Station on Kugmallit Bay, but the exact type and amount of data are not known. Sample sizes in Data Inventory Table 2 are from data pooled from several data sets.

Data Set 60-0010

At least some measurements were collected during this study, but the exact type and amount of data are not known. Sample sizes in Data Inventory Table 2 are from data pooled from several data sets.

Data Set 66-0011

This data set consists of a series of observations by different people on white whales trapped by ice in Eskimo Lakes.

Data Set 67-0007

This is the only data set which includes sightings of killer whales in the study area. These sightings were made by a fisheries officer and a local Inuit woman (T. Barry, CWS, Edmonton, pers. comm.).

Data Set 72-0016

White whale sounds recorded during this study in broken pack ice along the Alaskan Beaufort Sea coast have not been included in this data set.

Data Set 73-0017

The report mentions that several surveys were flown during this study, but no information is provided on the dates of the surveys, the aircraft used, and plane speed or altitude. Reconnaissance vessel surveys and field examination of landed whales may have been a part of this study, but the measurements obtained by these methods are not included in the report.

Data Set 74-0033

For nine whales, total length was calculated by adding an estimated tail length to the measured snout-to-base-of-tail figure.

Data Set 76-0034

On several occasions, white whale behaviour and distribution were recorded during and after a vessel pass.

Data Set 77-0037

On three occasions, white whale behaviour and distribution were recorded during and after a vessel pass.

Data Set 78-0008

On two occasions, white whale behaviour and distribution were recorded during and after a hunting episode.

Data Set 79-0027

Incidental sightings include an unusual sighting of 100 bowheads in Liverpool Bay. The authors indicate that distance estimates may not be reliable. On one survey, the distance between the vessel and an object was estimated by the observer and compared to the actual distance measured from the radar screen.

Data Set 79-0031

Four sightings lack information on the species, size or colour of the whales seen.

Data Set 79-0034

On one occasion, white whale behaviour and distribution were recorded before, during, and after drilling from an artificial island.

Data Set 80-0019

Total length estimates were probably observed from a vessel.

Data Set 80-0021

Possible inconsistencies of observers in estimating total length are reported. Shipboard surveys and all but four flights are part of 80-0019; information on the four additional flights can be obtained from Cascadia Research, Box 1434, Olympia, WA, U.S.A. 98507

Data Set 80-0022

This study was done in conjunction with 80-0019.

Data Set 80-0025

Faint calls were counted, but not analyzed; these calls were assumed to have been made by whales at distances greater than 4 km from the hydrophone.

Data Set 80-0026

Information recorded for off-transect areas included distance and/or orientation of bowheads to a vessel.

Data Set 81-0023

On two occasions, white whale behaviour and distribution were recorded before, during, and after a vessel pass.

Data Set 81-0027

Information on vessel tracks is recorded on data sheets but was not plotted.

Data Set 81-0052

Six measurements of dive time and six measurements of surface time are maximums for a group. Other information on these two parameters is recorded for whales identified by individual numbers. If details on the methodology were available, these other measurements would probably obtain a "4" rating.

Data Set 82-0001

On one occasion, white whale behaviour and distribution were recorded before and after a vessel pass.

Data Set 82-0049

For some sightings, bowhead behaviour was recorded by videotape, but it is not known if videotaped sightings were in Canadian waters.

APPENDIX 2

ADDRESSES OF INSTITUTIONS HAVING ORIGINAL WHALE DATA

INSTITUTION	CONTACT
Arctic Biological Station Dep. of Fisheries & Oceans 555 St. Pierre Blvd. Ste-Anne de Bellevue, Quebec H9X 3R4	Dr. D.E. Sergeant
Canadian Wildlife Service 5320-122nd Street Edmonton, Alberta T6H 3S5	Dr. T.W. Barry Dr. I. Stirling
Cascadia Research Collective Box 1434 Olympia, Washington, U.S.A. 98507	Mr. J.C. Cubbage
Dome Petroleum Limited Place 800-6th Avenue S.W. Calgary, Alberta T2P 0N1	Mr. R.A.W. Hoos
ESL Environmental Sciences Limited 2035 Mills Road, R.R.#2 Sidney, British Columbia V8L 3S1	Mr. J. Macdonald
Freshwater Institute Dep. of Fisheries & Oceans 501 University Crescent Winnipeg, Manitoba R3T 2N6	Mr. M.C.S. Kingsley Mr. J.T. Strong
Ian Robertson Consulting Ltd. 18040-20th Avenue Surrey, British Columbia V3G 5J9	Mr. I. Robertson
LGL Limited 22 Fisher Street P.O. Box 457 King City, Ontario L0G 1K0	Dr. R.A. Davis Mr. W.R. Koski Dr. W.J. Richardson
9768 Second Street Sidney, British Columbia V8L 3Y8	Mr. K. Finley Dr. S.R. Johnson

INSTITUTION	CONTACT
Naval Ocean Systems Center San Diego, California, U.S.A. 92152	Mr. D.K. Ljungblad
New Bedford Whaling Museum 18 Johnny Cake Hill New Bedford, Massachusetts, U.S.A. 02740	Dr. J.R. Bockstoce
PN Research Projects P.O. Box 2296 Sidney, British Columbia V8L 3S8	Ms. P. Norton
Renewable Resources Consulting Service 9865 West Saanich Road Sidney, British Columbia V8L 4M7	
University of California at Santa Cruz Santa Cruz, California, U.S.A. 95064	Dr. T. Dohl
West Coast Whale Research Foundation 204-1650 Duranleau Street Vancouver, British Columbia V6H 3S4	Dr. J.K.B. Ford

OTHER PUBLISHED CATALOGUES IN THE ADCAP SERIES

Cornford, A.B., D.D. Lemon, D.B. Fissel, H. Melling, B.D. Smiley, R.H. Herlinveaux and R.W. Macdonald. 1982. Arctic Data Compilation and Appraisal. Volume 1. Beaufort Sea: Physical Oceanography--Temperature, Salinity, Currents and Water Levels. Cdn. Data Report Hydrogr. Ocean Sciences. No. 5, Vol. 1, 279 p.

Thomas, D.J., R.W. Macdonald and A.B. Cornford. 1982. Arctic Data Compilation and Appraisal. Volume 2. Beaufort Sea: Chemical Oceanography. Cdn. Data Report Hydrogr. Ocean Sciences. No. 5, Vol. 2, 243 p.

Birch, J.R., D.B. Fissel, D.D. Lemon, A.B. Cornford, R.A. Lake, B.D. Smiley, R.W. Macdonald and R.H. Herlinveaux. 1983. Arctic Data Compilation and Appraisal. Volume 3. Northwest Passage: Physical Oceanography--Temperature, Salinity Currents and Water Levels. Cdn. Data Report Hydrogr. Ocean Sciences. No. 5, Vol. 3, 262 p.

Thomas, D.J., R.W. Macdonald, A.G. Francis, V. Wood and A.B. Cornford. 1983. Arctic Data Compilation and Appraisal. Volume 4. Northwest Passage: Chemical Oceanography. Cdn. Data Report Hydrogr. Ocean Sciences. No. 5, Vol. 4, 200 p.

Birch, J.R., D.B. Fissel, D.D. Lemon, A.B. Cornford, R.H. Herlinveaux, R.A. Lake and B.D. Smiley. 1983. Arctic Data Compilation and Appraisal. Volume 5. Baffin Bay: Physical Oceanography--Temperature, Salinity, Currents and Water Levels. Cdn. Data Report Hydrogr. Ocean Sciences. No. 5, Vol. 5, 372 p.

Fissel, D.B., L. Cuypers, D.D. Lemon, J.R. Birch, A.B. Cornford, R.A. Lake, B.D. Smiley, R.W. Macdonald and R.H. Herlinveaux. 1983. Arctic Data Compilation and Appraisal. Volume 6. Queen Elizabeth Islands: Physical Oceanography--Temperature, Salinity, Currents and Water Levels. Cdn. Data Report Hydrogr. Ocean Sciences. No. 5, Vol. 6, 214 p.

Birch, J.R., D.B. Fissel, A.B. Cornford and H. Melling. 1984. Arctic Data Compilation and Appraisal. Volume 7. Canada Basin-Arctic Ocean: Physical Oceanography--Temperature, Salinity, Currents and Water Levels. Cdn. Data Report Hydrogr. Ocean Sciences, No. 5, Vol. 7, 624 p.

Harwood, L.A., L.A. Turney, L. de March, B.D. Smiley and P. Norton. 1986. Arctic Data Compilation and Appraisal. Volume 8. Beaufort Sea: Biological Oceanography--Seals, 1826-1985. Cdn. Data Report Hydrogr. Ocean Sciences, No. 5, Vol. 8, (Part 1, 352 p.; Part 2, 301 p.)

Woods, S. and B.D. Smiley. 1987. Arctic Data Compilation and Appraisal. Volume 9. Beaufort Sea: Biological Oceanography--Bacteria, Plankton and Epontic Community, 1914 through 1985. Cdn. Data Report Hydrogr. Ocean Sciences, No. 5. Vol. 9, 412p.